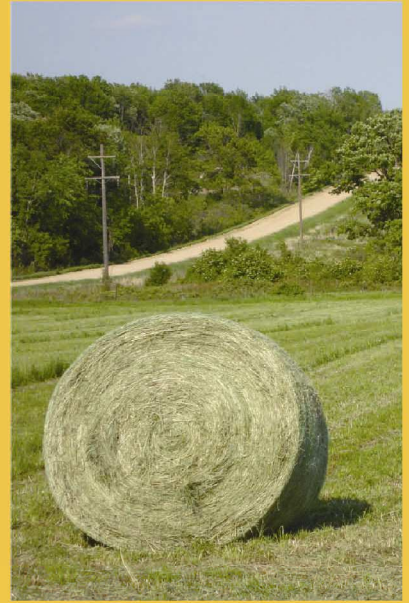


St. Croix County Comprehensive Plan Agriculture & Farmland Preservation



Adopted January 3, 2012

Adopted on January 3, 2012
St. Croix County Board of Supervisors
Resolution #4 (2012)

Prepared by:
St. Croix County Planning & Zoning Department
University of Wisconsin – Extension
West Central Wisconsin Regional Planning Commission

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ST. CROIX COUNTY COMPREHENSIVE PLAN AGRICULTURE & FARMLAND PRESERVATION

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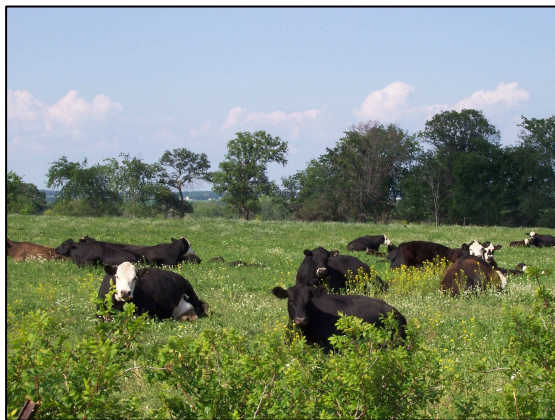
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INTRODUCTION

Over the past three decades, St. Croix County has experienced significant changes in agriculture and rural development. These changes are primarily a result of growth pressures from the Twin Cities Metropolitan Area, which have contributed to the largest percent population growth in the State, a significant change in who lives in the County and where they work, and the loss of farmland. This growth has caused an increase in traffic and an increased strain on public facilities and school districts. While there has been some loss of agricultural land caused by new residential, commercial, and industrial development, growth has been only one factor in the transformation of the types of agriculture in St. Croix County.

The western part of St. Croix County has experienced a reduction in the amount of agricultural land. At the same time, agriculture is still a substantial part of the fabric of St. Croix County. The eastern half of the County is predominantly rural and agriculture continues to be an important part of the economy and society. Despite the loss of farmland, the total number of farms in the County has not significantly changed. But the type of agriculture in the County has. In the last three decades, St. Croix County has been part of a nation-wide trend of larger-sized farms. There has been a decrease in the number of dairy farms, an increase in acres of corn and soybeans, a decrease in acres of hay, an increase in the number of horses, and a recent increase in direct market and organic farming. State and national agricultural policies, purchasing habits, agricultural practices, international trade, and commodity prices have been the major reasons why St. Croix County has seen changes in the types of agriculture.



The following section is both the agricultural element of St. Croix County's Comprehensive Plan and St. Croix County's Farmland Preservation Plan. On December 31, 2011, the existing St. Croix Farmland Preservation Plan certification is set to expire. This section is intended to fulfill the statutory requirements for both the farmland preservation plan, Chapter 91, Subchapter II, WI Statutes, and the agricultural element of the comprehensive plan, §66.1001(2), WI Statutes. It will explore the trends and future expectations of agriculture, the balance between growth and agriculture, and, to insure state certification of the

new farmland preservation plan, will address the following requirements:

- All plans must clearly state the county's goals and policies related to:
 - farmland preservation; and
 - agricultural development, including development of enterprises related to agriculture;
- Identification of farmland preservation areas; and
- The county's strategy to increase housing density outside of farmland preservation areas.

PUBLIC PARTICIPATION

Numerous public participation activities were held to provide ample opportunity for property owners, producers, agribusinesses, elected officials and citizens to provide input and comments during plan development and review.

Agriculture Issues for the agricultural element were discussed at the County's Kickoff and Visioning workshops for the Comprehensive Plan with the Citizen's Advisory Committee and elected officials. A draft vision was developed; it was further edited by the Farmland Preservation Workshops and Community Development Committee.

Four Issues Identification Workshops to gather input on the key issues facing agriculture and farmland preservation were held in May of 2010. Issues identified in the workshops were addressed in a follow-up survey and throughout plan development.

A survey was conducted from August to October of 2010 to gather opinions from farmers, farmland owners and agri-business owners/managers about farmland preservation and agricultural issues in St. Croix County. Please see Appendix A for the full survey report.

Two Goal Setting and LESA Workshops to evaluate draft goals and objectives and votes on site assessment factors to be included in the Land Evaluation Site Assessment system for developing the farmland preservation areas map were held in April of 2011.

A Policy Development Workshop to review final goals and objectives and brainstorm policies that would support and implement them was held in May of 2011.

An open house to present the Farmland Preservation Areas Map; goals, objectives and policies; conditions and trends report; and other project materials was held September of 2011.

A webpage, www.sccwi.us/farmpresplan, was utilized to provide public access to all drafts, reports, workshop and survey results.



AGRICULTURE VISION

In the year 2035, the farms and agricultural enterprises operate efficiently and effectively, and the farmers are good stewards of the land, preserving it for future generations. St. Croix's agricultural sector is particularly important to its residents. The County works to maintain farming as an occupation for families and as an active land use. The County recognizes that agricultural land is not undeveloped land waiting for other uses, but is a valuable and productive resource that supports a healthy agricultural industry. The County's agricultural industry includes farms of all types and sizes supported by a variety of economic and land use techniques.

AGRICULTURE GOALS & OBJECTIVES

Goal 1: *Preserve farmland to maintain and grow St. Croix County's agricultural industry and to enhance the rural landscape.*

Objectives:

- 1.1 Preserve productive soils identified by county land evaluation system.
- 1.2 Support public and/or private initiatives that preserve farmland.
- 1.3 Minimize the loss and fragmentation of farmland in rural areas.

Goal 2: *Promote agricultural development to support St. Croix County producers, businesses, and communities.*

Objectives:

- 2.1 Maintain and strengthen a farm operator's right to farm using accepted practices that do not threaten public health or safety.
- 2.2 Support economic incentives for landowners to keep productive agricultural land in agricultural use.
- 2.3 Support efforts which increase the viability and diversity of agriculture throughout the county.
- 2.4 Support agricultural processing and marketing initiatives for local, regional, and global markets.
- 2.5 Maintain and strengthen the county farm economy.
- 2.6 Identify, develop, and maintain agricultural infrastructure to support agricultural operations.
- 2.7 Provide technical assistance to farmers seeking to innovate or modernize their operations.

Goal 3: *Guide or manage development patterns that will preserve farmland and promote agricultural development.*

Objectives:

- 3.1 Guide urban growth into developed areas consistent with the community's willingness and ability to accommodate growth.
- 3.2 Guide rural development to locations that will not convert productive agricultural land.
- 3.3 Encourage conservation design development and private conservancy as methods for preserving productive agricultural land.
- 3.4 Discourage isolated non-agriculture commercial and industrial uses in agricultural areas.

Goal 4: *Conserve availability and quality of natural resources for agriculture.*

Objectives:

- 4.1 Encourage the conservation of groundwater and surface water quality and quantity.
- 4.2 Encourage and promote farming and forestry operations to follow best management practices and maintain strong stewardship principles.

- 4.3 Maintain soil productivity through appropriate agricultural practices.
- 4.4. Encourage the establishment and maintenance of agricultural crops and pasture for agricultural land adjacent to public habitat areas.

AGRICULTURE POLICIES

Preserve Farmland

- 1.1 St. Croix County will use the county Land Evaluation and Site Assessment (LESA) system to identify and protect productive farmland.
- 1.2 Lands planned for development in local comprehensive plans will not be included in farmland preservation areas and will not be eligible for state Farmland Preservation tax credits.
- 1.3 The county will establish a producer advisory group to evaluate the LESA scoring system and make recommendations based on LESA system.
- 1.4 The county will develop and maintain a county Farmland Preservation Plan and ordinance that can be certified by the state to make St. Croix County producers eligible for state Farmland Preservation tax credits.
- 1.5 The county will encourage the use of the Farmland Preservation Program as one tool to protect agricultural land.
- 1.6 The county will establish a farmland preservation area consistent with the Chapter 91, Wisconsin Statutes and the Farmland Preservation program. The farmland preservation area will be countywide, consisting of all parcels with a LESA composite score of 118 or above that are eligible to be included based on Chapter 91 standards. In implementing the plan, the farmland preservation area will be land that is eligible and recommended for farmland preservation zoning, Agricultural Enterprise Areas (AEA) and/or Purchase of Agricultural Conservation Easements (PACE).
- 1.7 The delineation of the farmland preservation zoning districts to implement the plan shall be developed cooperatively between the county and towns that are willing to adopt it.
- 1.8 The county will support local landowner petitions to establish AEA's.
- 1.9 The county will support the PACE program.
- 1.10 The county will support and encourage 3-party agreements to preserve farmland that include multiple partners such as land-trust, government, and land owner.
- 1.11 The county will advise legislators about policy impacts on St. Croix County agriculture.
- 1.12 The county will amend the St. Croix County Zoning Ordinance to establish and make available zoning districts with residential densities of 1 unit/40 acres and 1 unit/20 acres based on the productivity of the farmland as rated by the LESA system.
- 1.13 The county will amend the St. Croix County Zoning Ordinance to establish zoning standards to set a minimum lot size of 1.5 acres and a maximum lot size of 5.0 acres in farmland preservation areas.

Support & Promote Agriculture

- 2.1 The county will favor existing agricultural land uses over newly established non-agricultural land uses when considering land use conflicts in the Farmland Preservation Area.
- 2.2 The county will adopt a notification ordinance to inform new residents about the state right to farm law.
- 2.3 The county will update and promote the use of the Rural Living Guide.
- 2.4 The county will promote programs/awards in the county that recognize quality agricultural producers such as the master agriculturalist.
- 2.5 The county will promote the development and distribution of a county wide newsletter/information bulletin focusing on agriculture updates/current/programs, such as Facebook or other social media.
- 2.6 The county will educate the public on why preserving agricultural land is important, including food production, wildlife habitat, and economic importance to community.
- 2.7 The county will consistently administer the agricultural use-value conversion charge in all Towns through town assessors and County Treasurer.
- 2.8 The county will recommend utilizing the agricultural use-value conversion charge to support county farmland protection programs that leverage other public and private investment.
- 2.9 The county will support financial incentives for beginning farmers and farm succession programs for existing operations.
- 2.10 Agricultural uses should include a broad range of activities such as livestock and crop production, plant nurseries, tree farms, orchards, community-supported agriculture, hobby farms, organic production, vineyard, bio-energy production and all current alternatives.
- 2.11 The county will amend the St. Croix County Zoning Ordinance to establish multiple agricultural zoning districts to accommodate diverse agricultural activities and related businesses.
- 2.12 The county will provide and maintain networking with producer peer groups, farmers' markets for specialty crops and educational/promotional events such as Farm City Day.
- 2.13 Zoning should adapt to innovations in agriculture in the farmland preservation areas.
- 2.14 The county will work with St. Croix County Economic Development Corporation and other economic development agencies to implement economic development programs that support agriculture and related businesses.
- 2.15 The county will encourage bio-energy production to diversify energy resources and therefore enhance the agricultural economy.
- 2.16 The county will encourage young people to seriously consider pursuing an agriculture-related education and to also consider entering agriculture as a profession.
- 2.17 The county will support the construction and/or maintenance of physical infrastructure including roads, rail, high-speed telecommunications, and the utility grid.

- 2.18 The county will develop and distribute electronic and print publications such as the Rural Living Guide, Farm Fresh Atlas, UWEX newsletter.
- 2.19 Maintain educational agencies in or near St. Croix County.
- 2.20 Maintain county, state, and federal agricultural agencies to provide technical and financial assistance to the agricultural community.

Guide/Manage Development

- 3.1 The county will establish incentives/regulations to encourage development in existing areas that are able to accommodate new development, such as zoning, density bonus in areas other than farmland preservation areas, etc.
- 3.2 The county will consider a feasibility study to evaluate the creation of transfer of development rights (TDR) programs to encourage the preservation of productive farmland.
- 3.3 The county will amend the St. Croix County Zoning Ordinance to establish and make available zoning standards in conformance with Chapter 91 to guide non-farm development to locations outside of farmland preservation areas.
- 3.4 The county will amend the St. Croix County Zoning Ordinance to establish and make available zoning standards to prohibit major subdivisions in the farmland preservation areas.
- 3.5 The county will prohibit non-farm development on productive farmland as identified by St. Croix County's LESA system wherever the respective town will support it.
- 3.6 The county will amend the St. Croix County Zoning Ordinance to establish and make available zoning standards in conformance with Chapter 91 to guide any non-farm development in farmland preservation areas to non-productive soils.
- 3.7 The county will use agricultural preservation tools such as farmland preservation zoning to guide town/county/city decisions to preserve productive farmland.
- 3.8 The county will establish multiple zoning agricultural districts to accommodate a variety of agricultural operations.
- 3.9 Only commercial and industrial uses clearly related to agricultural production should be allowed in the farmland preservation area wherever the respective town will support it.
- 3.10 The county will encourage conservation site design on land located at the edges of the farmland preservation area to serve as a buffer between farmland and non-farm development.
- 3.11 The county will encourage and support private conservancy efforts to protect and preserve productive agricultural land.
- 3.12 The county will support and encourage commercial and industrial land uses that are agriculturally related and support local agriculture.
- 3.13 The county will establish zoning standards for commercial and industrial land uses clearly related to agricultural production in the farmland preservation areas wherever the respective town will support it.
- 3.14 The county will limit to locations outside of the farmland preservation area commercial and industrial land uses that are not clearly related to agricultural production.

- 3.15 Agriculture-related commercial and industrial development should be compatible with adjacent land uses and located on non-productive soils.

Conserve Resources

- 4.1 The county will promote conservation programs and best management practices so as to increase the infiltration of storm water runoff.
- 4.2 The county will promote conservation programs and best management practices for agricultural uses that consume ground water resources.
- 4.3 The county will promote conservation programs and best management practices to reduce soil erosion.
- 4.4 The county will encourage the implementation of best management practices for agriculture, which conserve soil and water, and reduce the use of pesticides.
- 4.5 The county will encourage the development and implementation of nutrient management plans to limit nutrient runoff and soil erosion.
- 4.6 The county will promote participation in local, state, and federal conservation programs.
- 4.7 The county will encourage cooperation between agricultural producers and public resource managers.

FARMLAND PRESERVATION AREA

The farmland preservation area was identified and designated using St. Croix County's the Land Evaluation Site Assessment (LESA) System and the future land use designations of local comprehensive plans. The process to designate these areas and develop a map is described in the next sections.

Land Evaluation Site Assessment System for Agriculture

In 1981, USDA NRCS developed a system for evaluating agricultural lands, Land Evaluation and Site Assessment (LESA), which uses detailed considerations of soil capability and potential yields, and provides for the assessment of factors beyond soil productivity in the determination of agricultural potential. The system is now widely used throughout the U.S. The LESA system presents the opportunity to define agricultural lands that have the most production potential.

The Land Evaluation and Site Assessment (LESA) system is a point-based approach that is generally used for rating the relative value of agricultural land resources. In basic terms, a given LESA model is created by defining and measuring two separate sets of factors. The first set, Land Evaluation (LE), includes factors that measure the inherent soil-based qualities of land as they relate to agricultural suitability. The second set, Site Assessment (SA), includes factors that are intended to measure social, economic and geographic attributes that also contribute to the overall value of agricultural land. While this dual rating approach is common to all LESA models, the individual land evaluation and site assessment factors that are ultimately utilized and measured can vary considerably, and can be selected to meet the local or regional needs and conditions a LESA model is designed to address. The LESA methodology lends itself well to adaptation and customization in individual states and localities.

Also in addition to ranking soils for agricultural potential, the LESA system can provide a systematic and objective way to evaluate and numerically rank soils for their relative value for any specific use. The advantage of the LESA system is that it is an objective, consistent and analytical tool to aid decision-makers in comparing agricultural sites based on their agricultural or development value. The LESA system is a valuable tool for determining the use with the least detrimental impact to the environment, economy and aesthetics. It can be used in conjunction with other pertinent information including public input, existing plans, maps, etc.

In 2002, a LESA system was developed for St. Croix County by a committee consisting of members of the former Land and Water Conservation and Planning and Zoning committees; citizens; town officials; county staff from the Land and Water Conservation, Zoning and Planning departments; and NRCS staff. It was adjusted to meet the local soil conditions and site assessment concerns in St. Croix County. It was further refined as part of this project to meet the needs of the farmland preservation goals and objectives. A complete report on the development and design of St. Croix County's LESA system is found in Appendix B.

St. Croix County used the LESA system to rank agricultural lands based on their agricultural value and as the first component in developing the Farmland Preservation Areas Map. The second component of the Farmland Preservation Areas Map is the compilation of the future land use maps from local comprehensive plans, Future Land Use – Rural Areas. Each of these components and the associated map is described and provided below.

Land Evaluation (LE)

The Land Evaluation (LE) component to the LESA system is based on soils and their characteristics; it reflects soil productivity and the economic and environmental cost of producing a crop. The LE is generally stable and unchanging because soils change very slowly over time. The LE physical and chemical soil properties considered in the LE rating, either

directly or indirectly, include: soil texture, soil erodibility, climate, wetness capacity, flooding, slope, rock fragments, available water capacity, pH (alkalinity versus acidity) and permeability.

In developing the system for St. Croix County, the LE was refined to take into effect the local soil conditions for St. Croix County. Please see the LESA System, Appendix B for more details.

Three soil property indexes are combined to produce the LE rating. They are then weighted based on their relative importance for agricultural use in St. Croix County. The indexes are Prime Farmland, weighted at 10% of the total; Land Capability Class, weighted at 30% of the total; and Productivity for Corn and Alfalfa, weighted at 60% of the total. The possible ratings for all soils in the county range from 0 to 100 points, higher ratings have a greater value for agriculture.

Site Assessment (SA)

The SA measures non-soil characteristics and development pressure based on adopted plans and policies and other social, economic, and geographical attributes. The SA is dynamic and changes on a continual basis because there are regular changes in development, property ownership, roadway improvements, sewer expansions, etc. happening throughout an area.

The St. Croix County SA rating is based on 10 factors worth a maximum of 10 points each, none are weighted. These factors include: Size of Tract of Total Contiguous Ownership, Compatibility of Adjacent Land Uses, Compatibility of Surrounding Land Uses, Existing Land Use Policy on Site, Existing Land Use Policy on Adjacent Sites, Future Land Use Policy on Existing Site, Future Land Use Policy on Adjacent Sites, Distance To Public Sewer, Road Classification of Site Access and Environmental and Public Values of Site. Please see St. Croix County's LESA System, Appendix B for more details.

The possible SA ratings range from 0 to 100 points; higher ratings have a greater value for agriculture.

Two of the SA factors, Future Land Use Policy on Existing Site and Future Land Use Policy on Adjacent Sites, necessitated creating a database of the future land uses in locally adopted comprehensive plans (town, village and city) and the County Development Management Plan. Because the local plan maps were composed of widely different information, including varied legends, colors, classes and terminology, it was necessary to synthesize this diverse database into a uniform system with a reasonable number of future land use designations that could be used to create a composite map. The result was the generalized future local land use – rural areas database and map. This database was used to score the two Future Land Use Policy SA factors.

Land Evaluation Site Assessment (LESA)

The two components of the system, Land Evaluation, LE, and Site Assessment, SA, are each 50% of the total composite score. The final composite scores are depicted in the LESA map. The higher Composite Scores, 118 and above, are shown in light and dark green and are the best sites for farmland preservation. The lower composite scores, 117 and below, are shown in yellow and orange and are the poorer sites for farmland preservation. Please note that the final product is not just those soils that are best for growing crops. In a comparison of the LE and SA maps with the final LESA map it is apparent that areas with higher quality soils, in Star Prairie, Richmond and Hammond, are not identified on the LESA map because their low SA score reduces their value for farmland preservation. Overall the final LESA map follows the patterns laid out in the LE and SA maps; the more productive soils have been less impacted or encroached on by development pressure because of their greater value for farming.

Land Evaluation

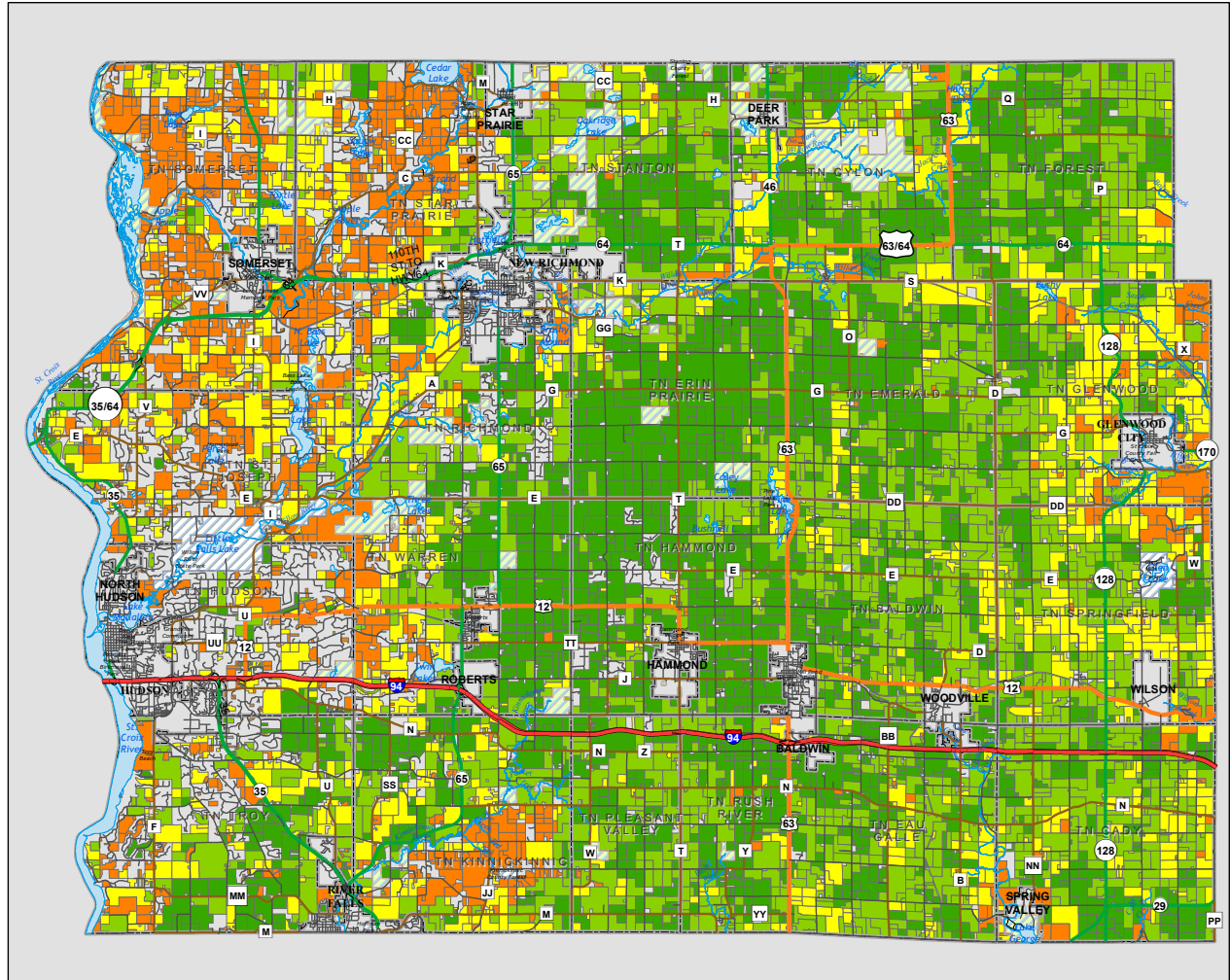
LEGEND

Land Evaluation Score

- 7 - 52 (Poorest Land for Growing Crops)
- 53 - 65
- 66 - 76
- 77 - 100 (Best Land for Growing Crops)
- Parks
- Public Open Space

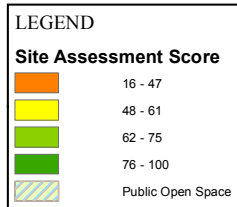


St. Croix County, Wisconsin
Land Evaluation and Site Assessment:
LESA Program

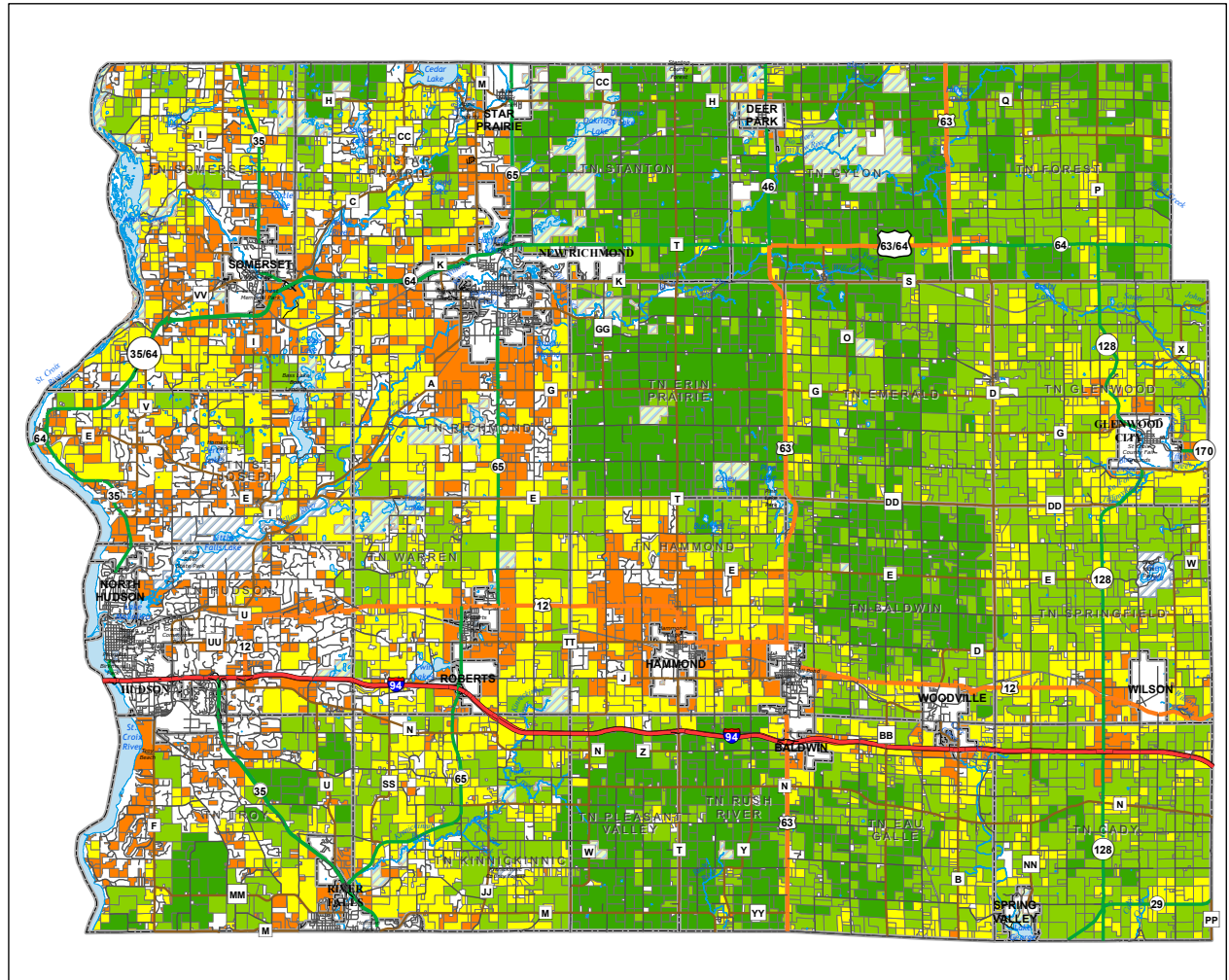


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Site Assessment

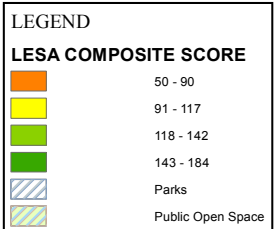


St. Croix County, Wisconsin
Land Evaluation and Site Assessment:
LESA Program

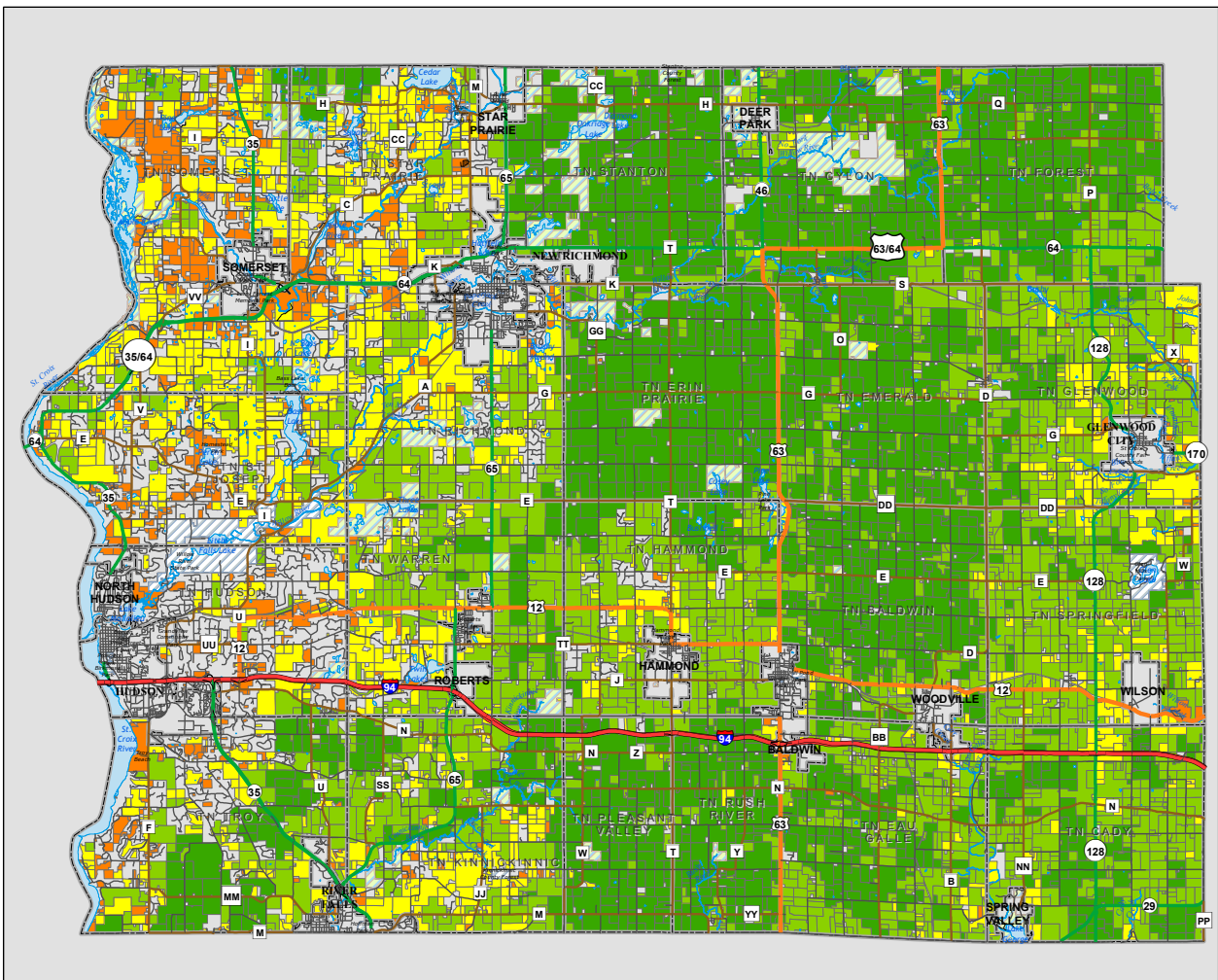


Date: 10/06/2011

Land Evaluation Site Assessment



St. Croix County, Wisconsin
Land Evaluation and Site Assessment:
LESA Program



Date: 10/06/2011

Future Land Use – Rural Areas

The primary use for generalized future local land use – rural areas database was determined by the Farmland Preservation law (Chapter 91). It requires that all lands planned for development in the next 15 years be excluded from the Farmland Preservation Area map. In a review of the future land use narratives of the locally adopted plans, it was determined that two future land use categories, Agriculture and Mixed Rural Agriculture, are not planned for development for the next 15 years. All other future land use categories were generally excluded from the Farmland Preservation Area map.

The local comprehensive plan narratives in a few instances indicated some areas in the Mixed Rural Residential future land use category are not planned for development over a shorter timeframe of 15 years, but are planned for development over a longer timeframe. In some situations, the town board provided additional clarification and interpretation of their comprehensive plan. These areas were generally not included in the Farmland Preservation Area with a few exceptions for adjacent property owners and designated Agriculture Enterprise Areas.

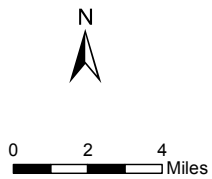
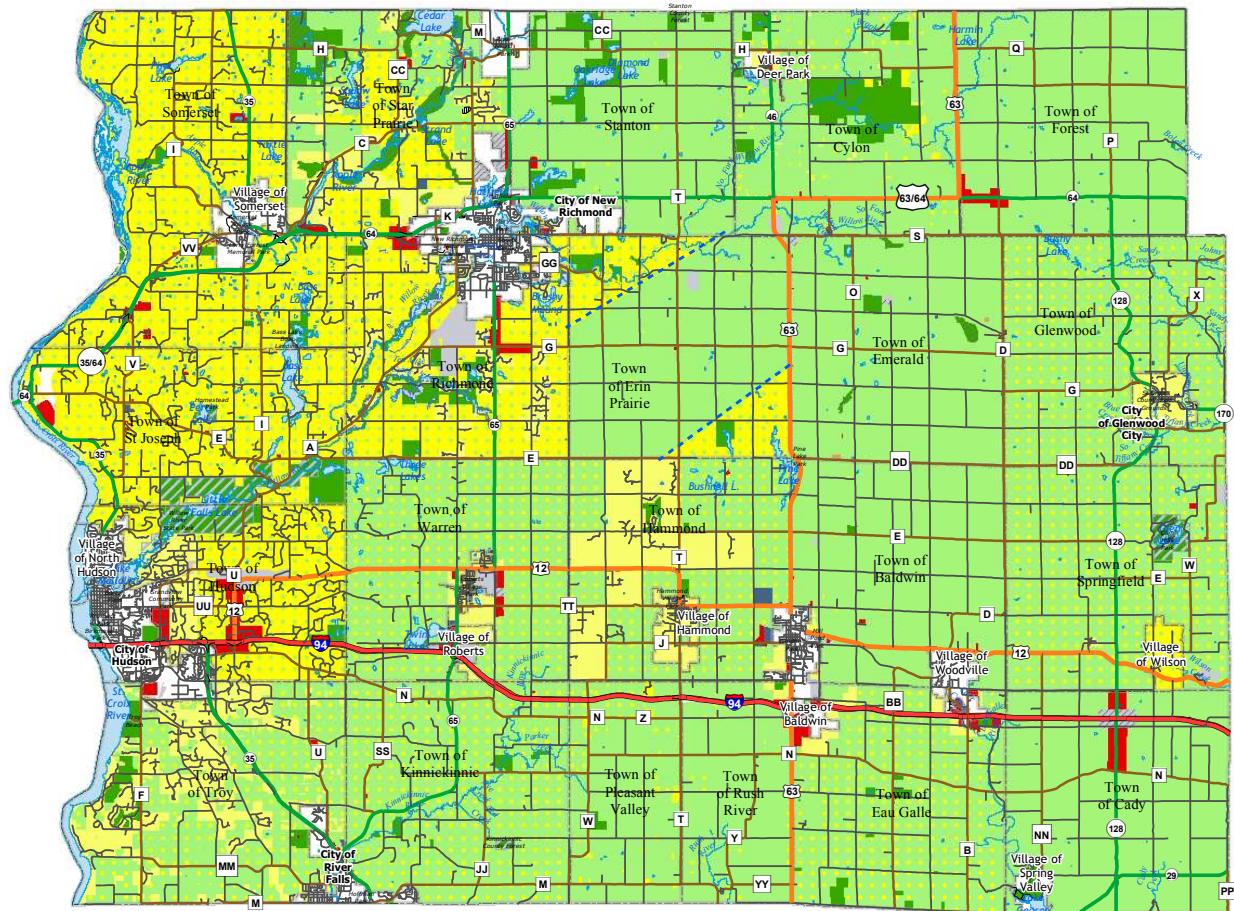
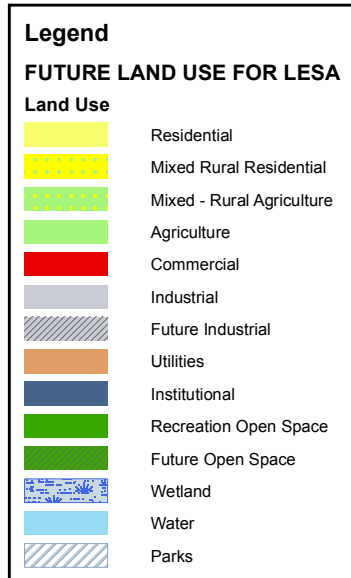
Farmland Preservation Areas Mapped

The Farmland Preservation Areas map combines data from the LESA system map and the St. Croix County Future Land Use-Rural Areas map. Only sites in a shade of green on both maps are identified as Farmland Preservation Areas. The distribution of farmland preservation areas clearly shows the results of combining both the LESA and Future Land Use data. Those communities with the more productive soils have identified agriculture as an important future land use. This is especially true in the central and eastern areas of the county. Those communities most impacted by development, in the western end of the county, have designed their future land uses as a combination of rural residential and agriculture. The resultant Farmland Preservation Areas map excludes those areas of the county where development is expected and includes those areas with a commitment to agriculture. It follows the historic development pattern while preserving the most productive soils in communities that have determined agriculture and farming will be an important part of their future.

All sites in the county with a majority of the site in agricultural use or a compatible adjacent land use were analyzed by the LESA system. The County's 2010 tax assessment parcels were used to make these determinations. These sites encompassed about 385,000 acres of agricultural, open or wooded land. Of that, 295,000 acres were determined to be most suitable for long-term agriculture and 90,000 acres least suitable for long-term agriculture. An additional 24,000 acres was removed from the most suitable category because it is planned for long-term development in local comprehensive plans. Of the existing sites in the county where a majority of the site is in agricultural use, approximately 270,000 acres of land were included in the Farmland Preservation Areas and approximately 114,000 acres of land were not. According to the Wisconsin Department of Administration, St. Croix County's population and housing projections through 2035 would need approximately 47,000 acres.














Farmland Preservation Areas will be eligible to participate in Agriculture Enterprise Areas (AEA), Purchase of Agricultural Conservation Easements (PACE) and Farmland Preservation Zoning through the WI Farmland Preservation Program if properties meet the program requirements. Areas in white on the Farmland Preservation Areas Map will not be eligible to participate in Agriculture Enterprise Areas (AEA), Purchase of Agricultural Conservation Easements (PACE) and Farmland Preservation Zoning through the WI Farmland Preservation Program. Participation in AEAs, PACE, and Farmland Preservation Zoning will require additional, subsequent actions by the County, towns and landowners. The Farmland Preservation Areas are mapped for each town in the County in Appendix C.

Generalized Future Local Land Use ST. CROIX COUNTY FUTURE LAND USE - RURAL AREAS



Date: 8/25/2011

Farmland Preservation Plan Map for St. Croix County, Wisconsin

LEGEND	
Farmland Preservation Areas	
	Farmland Preservation Areas
	Parcels not eligible for FLP programs
	Political Boundaries
	PLSS Section Lines
	Water Bodies
	Public Open Space
	Parks
Roads	
	Interstate
	US Highway
	State Highway
	County Trunk Highway
	Local Road
	Ramps

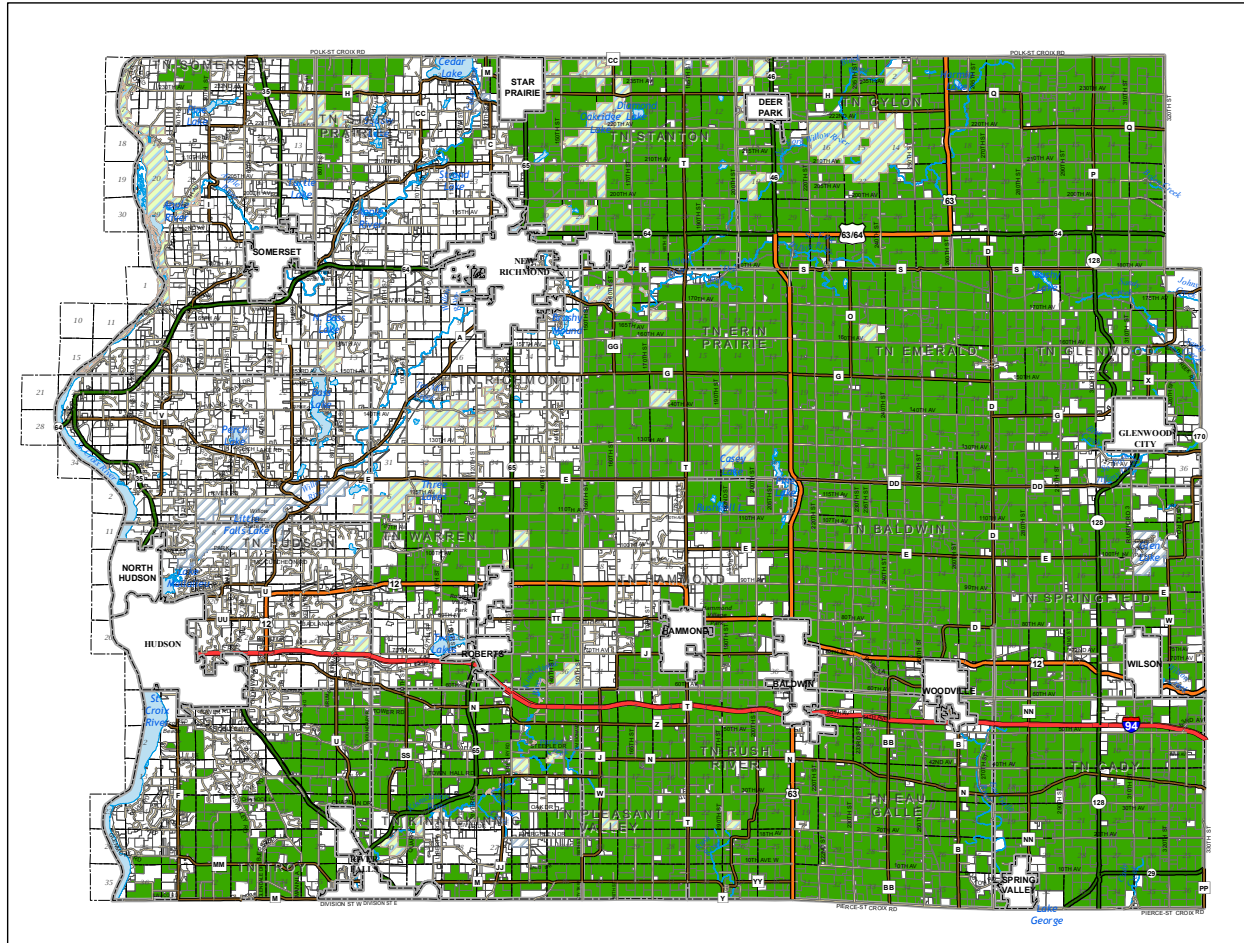


1:190,000

Coordinate System: NAD 1983 HARN WISCONSIN ST Croix County Feet
Projection: Transverse Mercator
Datum: North American 1983 HARN
False Easting: 542,999.9970
False Northing: 0.0040
Central Meridian: -92.6333
Scale Factor: 1.0000
Latitude Of Origin: 44.0361
Units: Foot US

St. Croix County, Wisconsin
Farmland Preservation Plan

Date: 12/15/2011



St. Croix County Planning & Zoning
1101 Carmichael Rd.
Hudson, WI
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IMPLEMENTATION

Implementation of the Farmland Preservation Plan will follow the stated policies of this plan. Key steps are highlighted here. The county will update the agriculture zoning districts in the County Zoning Ordinance in 2012. Revised district language and zoning maps will follow the policies of this plan and will need review, approval and adoption by both the county and towns before taking effect. Amendments to the zoning ordinance to create farmland preservation districts will conform to the requirements of Chapter 91, WI Stats. and will ensure the continued state certification of the ordinance.

The county will continue to encourage and support local landowner petitions to establish AEAs and if options become available to implement the PACE program will encourage and support that also.

The County will also identify and consider amendments to the general zoning ordinance, land division ordinance and other land use ordinances that would encourage higher density housing outside the farmland preservation areas, including incentives for development outside the farmland preservation areas, conservation design housing as a buffer adjacent to the farmland preservation area and prohibiting major subdivisions in farmland preservation areas.

AGRICULTURE CONDITIONS & TRENDS

Agriculture Trends Introduction

Agricultural practices in the County have changed significantly over the past 30 years. There are numerous reasons for these shifts in agricultural activities and practices including changes in economics, population growth, societal changes, operational practices, support services and state and national policies. The county's rapid population increase has played a role in the loss of farmland, most significantly in the western portion of the county. However, the eastern part remains strongly committed to agriculture, albeit changing types of agriculture.

The County's agricultural industry's reduction in the number of dairy farms and increases in dairy, corn and soybean production are perhaps the most prominent of the changes in agriculture. Changes in the dairy industry have been happening over the past few decades and have been experienced in every county in the surrounding region. Even with the changes in the County's agricultural industry and the existing agricultural economy of the County and region, St. Croix County remains one of the top counties in the state in terms of sales of some agricultural commodities. Of Wisconsin's 72 counties, St. Croix ranked 25th for value of livestock and their products and 33rd for crops and nursery products in 2007. Nationally, St. Croix ranked in the top 100 counties for dairy, oats and corn for silage.

This conditions and trends analysis highlights the changes in agriculture, farming and related infrastructure over the past decades.

Agricultural Sales

Figure 1 shows the 2007 agricultural sales for St. Croix County and surrounding counties. The County's agricultural economy has shifted and changed since the 1980's and especially in the last decade. Between 1997 and 2007, there was a noticeable change in the total value of agricultural sales, with the County experiencing a 15 percent increase from \$124.0 million to \$142.5 million (constant 2007 dollars). The dairy industry has seen decreases in farm and cow numbers while increasing milk production and revenues, corn and soybean acres have increased with hay and oat acres decreased and horse numbers grew while cattle and pigs decreased. St. Croix County farmers sold more than \$142 million worth of agricultural products in 2007, which had a significant economic impact. Seventy-seven percent of this value was in livestock, poultry and related products and of that, 56 percent was dairy. Crop and nursery products accounted for 23 percent of sales, of which grain was 17 percent. St. Croix County's total sales were higher than the neighboring counties of Pierce and Polk. Dairy sales were higher than all three neighboring counties. These numbers demonstrate that despite the county's population growth agriculture is still financially strong and the dairy industry is the leading agricultural activity in both St. Croix County and the region.

In 2007, the County ranked sixth in the State for the number of turkeys, this is likely because of the nearby turkey processing facilities in Barron County; ninth in the state for value of poultry and eggs; and sixth in the State in number of horses and ninth in the state for value of horses. The high number of horses can likely be attributed to the higher income population that resides in St. Croix County. Figure 1A depicts St. Croix County's state and national rank for its top agricultural activities.

Figure 1

Annual Agricultural Sales, 2007				
	Dunn	Pierce	Polk	St. Croix
Livestock/Poultry (Total)	\$122,165,000	\$76,659,000	\$83,188,000	\$110,252,000
Dairy	\$80,354,000	\$57,913,000	\$57,835,000	\$80,409,000
Cattle & Calves	\$16,878,000	\$16,993,000	\$11,293,000	\$15,436,000
Poultry/Eggs	(D)	(D)	\$12,241,000	\$11,443,000
Hogs & Pigs	(D)	\$658,000	\$366,000	\$1,794,000
Horses & Ponies	\$490,000	\$250,000	\$94,000	\$353,000
Other Animals	\$781,000	\$354,000	\$539,000	\$185,000
Crops/Greenhouse/Nursery (Total)	\$51,438,000	\$38,535,000	\$20,472,000	\$32,269,000
Grains	\$39,141,000	\$30,883,000	\$14,995,000	\$23,647,000
Greenhouse/Nursery	314,000	\$3,736,000	\$1,193,000	\$4,067,000
Vegetables	--	\$1,097,000	\$1,773,000	\$2,115,000
Hay	(D)	\$1,940,000	\$3,243,000	\$2,153,000
Fruit/Berries	(D)	\$756,000	\$857,000	\$163,000
Christmas Trees/Woody Shrubs	(D)	\$122,000	\$100,000	\$124,000
Total All Sales	\$173,603,000	\$115,194,000	\$103,660,000	\$142,521,000
Source: 2007 Census of Agriculture (D) Withheld to avoid disclosing data for individual farms.				

Figure 1A

St. Croix County State and National Rank, 2007		
Agricultural Sales	State Rank	National Rank
Dairy	22 of 70	82 of 2,493
Poultry/Eggs	9 of 72	533 of 3,020
Horses & Ponies	9 of 70	687 of 3,024
Hogs & Pigs	15 of 71	783 of 2,922
Aquaculture	9 of 58	351 of 1,498
Total Value Livestock/Poultry/Products	25 of 72	337 of 3,069
Grains	26 of 71	923 of 2,933
Greenhouse/Nursery/Sod	18 of 70	542 of 2,703
Other Crops & Hay	21 of 72	811 of 3,054
Vegetables/Melons/Potatoes	33 of 71	564 of 2,796
Total Value Crops/Greenhouse/Nursery	33 of 72	1,157 of 3,072
Total Value All Ag Products	31 of 72	577 of 3,076
Turkeys Inventory	6 of 70	(D)
Oats (acres)	10 of 70	62 of 1,957
Soybeans (acres)	12 of 66	641 of 2,039
Corn for silage (acres)	15 of 70	64 of 2,263
Corn for grain (acres)	17 of 68	475 of 2,634
Source: 2007 Census of Agriculture (D) Withheld to avoid disclosing data for individual farms.		

The secondary economic impacts of agriculture are also significant in St. Croix County. Agriculture provides 3,605 jobs for farm owners and managers, employees, veterinarians, crop and livestock consultants, feed, fuel and other crop input supplies, machinery dealers, barn builders, agricultural lenders and other professionals in the food processing and other value

added industries. Agriculture accounts for \$532 million in business sales from direct agricultural sales of products, sales of inputs, services and equipment and earnings spent. Agriculture pays over \$15 million in sales, property and income taxes. Figure 2 shows the sales, expenses, wages and government payments for St. Croix County agriculture producers.

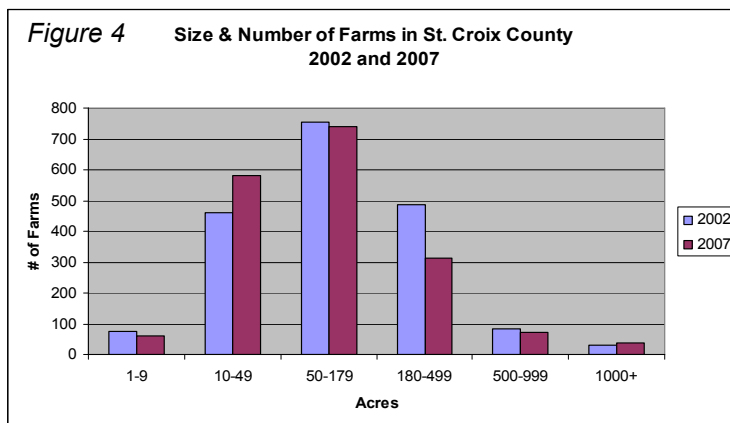
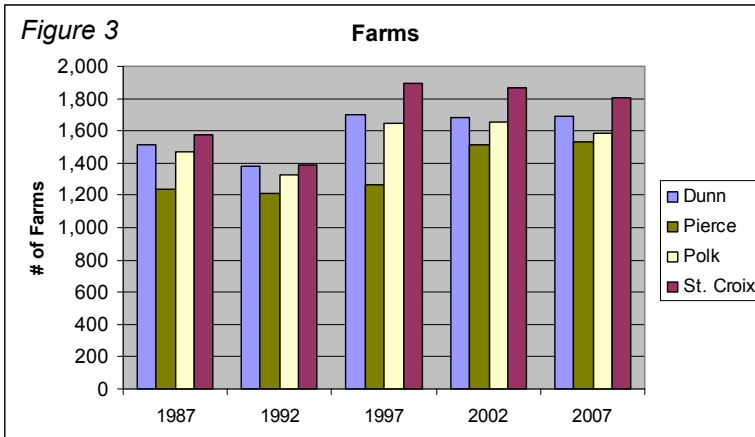
Figure 2

<i>Economics & Labor Impact of Agriculture – 1987 to 2007</i>					
ITEM	1987	1992	1997	2002	2007
Total Sales	\$87,214,000	\$91,849,00	\$89,852,000	\$97,863,000	\$142,521,000
Total Sales Average per Farm	\$85,840	\$105,816	\$119,009	\$52,502	\$78,828
Total Farm Production Expenses	\$69,510,00	\$78,990,000	\$74,569,000	\$85,449,000	\$125,694,000
Total Farm Production Expenses Average per Farm	\$44,105	\$56,786	\$49,059	\$45,695	\$69,521
Hired Farm Labor (farms)	NA	607	468	297	355
Hired Farm Labor (workers)	NA	1,817	1,591	1,210	1,310
Hired Farm Labor (wages)	NA	\$6,164,000	\$6,122,000	\$9,805,000	\$14,123,000
Total Government Payments	\$6,678,000	\$4,457,000	\$5,240,556	\$5,677,000	\$4,957,000
Government Payments Average per Farm	\$8,305	\$6,794	\$3,146	\$5,632	\$4,111
<i>Source: US Census of Agriculture, Farms with sales Greater than \$10,000</i>					

Farms

The total number of farms increased between 1987 and 2007, as shown in Figure 3. In 1987, St. Croix County had a total of 1,576 farms; in 2007, the County had 1,808 farms (15 percent increase). However, there has been a small decrease (3 percent) in the number of farms from 2002 to 2007. Similar trends occurred in Polk and Dunn Counties.

In 2007, the average farm size decreased to 171 acres (11 percent). Figure 4 shows a growth in the number of smaller farms and very large farms. From 2002 to 2007, the number of farms comprised of 10-49 acres grew by 26 percent (from 461 to 583). Similarly, very large farms that consisted of 1,000 or more acres grew by 26 percent (from 31 to 39). The number of farms that consisted of 1-9, 50-179, 180-499 and 500-999 acres all decreased. Most notably, the number of farms comprised of 180 to 499 acres decreased from 488 to 312 (36 percent).



Source: 2007 Census of Agriculture

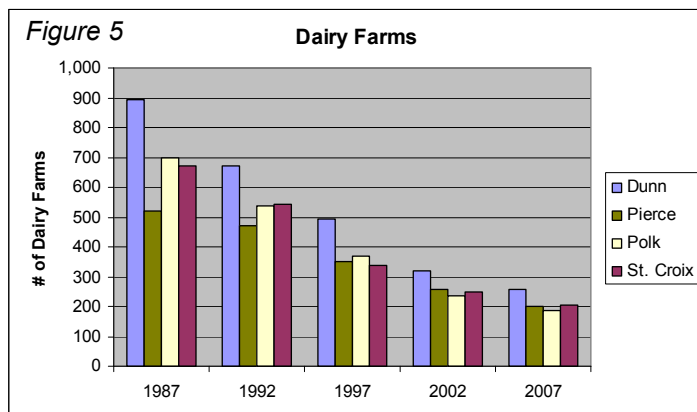
This change in the number of different sized farms is a result of several issues such as proximity to the Twin Cities, commodity prices, changes in society, the changing global economy, and state and national agricultural policies. Proximity to the Twin Cities has among other things created a specific market for raising and training horses. Commodity prices, the changing global economy, and agricultural policies are always in flux and have changed the way people farm. Changes in society that

have impacted farm size and type include families having less children and young people not desiring to live in rural areas, and a higher percentage of young people attending college.

There has also been a change in farm size based on the value of farm products sold. The percentage of farms that sell over \$500,000 (in constant 2007 dollars) has increased. In 2002, the County had 53 farms that had a value of sales between \$250,000 and \$499,000 and 27 farms that had a value of sales over \$500,000. These numbers increased in 2007, when the County had 71 farms with a value of sales between \$250,000 and \$499,000 and 48 farms with a value of sales over \$500,000.

It should be noted that during any Census year, the total value is partially dependent on commodity prices, which can fluctuate even during a single year. An example of this is 2007 milk prices in Wisconsin, which at one point was \$15.10 per cwt and six months later was \$21.50 per cwt. Other examples include corn and soybeans. Corn has fluctuated between \$2/bu

and \$5/bu over the past six years and soybeans between \$6 and \$12. In addition, the cost of production inputs for all products can change from year to year affecting profitability.



Dairy Farms

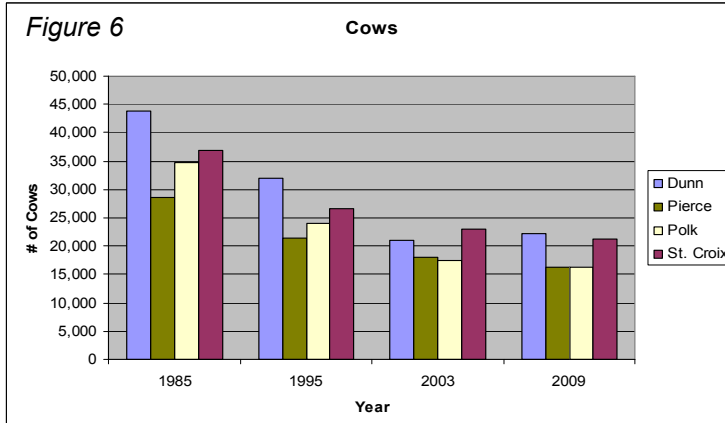
There has been a decrease of dairy farms in St. Croix County and the surrounding region (Figure 5). The number of dairy farms significantly dropped between 1987 and 2007. St. Croix County had 671 dairy farms in 1987 and 250 in 2002, a 63 percent decrease. Between 2002 and 2007, there were 47 fewer dairy farms, a 19 percent decrease. This trend is consistent with what is happening in

neighboring counties, the region and the state; all have lost numerous dairy farms. Dunn County had the most dramatic numeric decrease moving from almost 900 dairy farms in 1987 to about 250 in 2007, a 72 percent decrease, while Polk County had the largest percentage decrease, 73 percent over the same timeframe. Pierce had the fewest number of dairy farms in 1987 and also the fewest losses, dropping from over 500 to 200 farms from 1987 to 2007, a 60 percent decrease. During this timeframe (1987-2007), dairy farms in Wisconsin decreased by 62 percent.

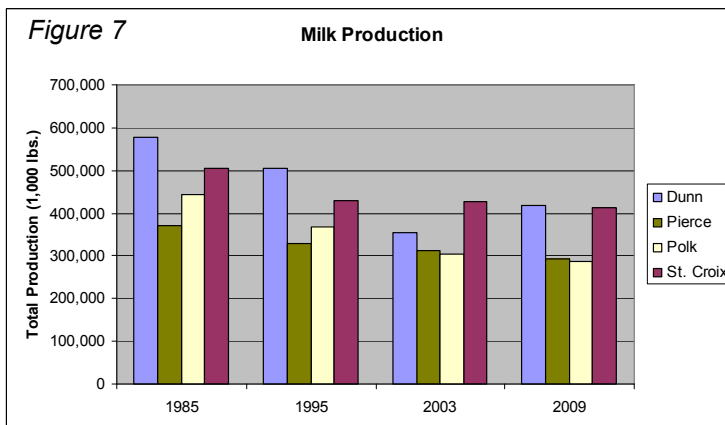
Cows & Milk Production

The County and region have also experienced a decrease in the total number of cows, although not as dramatic as the loss of dairy farms. As seen in *Figure 6*, in 1985 St. Croix County had 37,000 cows. This number dropped to 21,200 in 2009 (-15,100), about 42 percent. The County lost 1/4 of its cows between 1985 and 1995 (-10,000). Again this trend is not specific to St. Croix County. Dairy cow numbers in the surrounding counties dropped by 50 percent in Dunn, 45 percent in Pierce and 40 percent in Polk. Although these counties are still losing dairy cows, the losses have tapered off in the past few years.

Since milk production per cow has significantly increased, total milk production in St. Croix County and the region has not decreased as rapidly as dairy farms and cows. Between 1985 and 2009, the County experienced a reduction from 506 million pounds to 413 million pounds



Source: National Agricultural Statistics Service



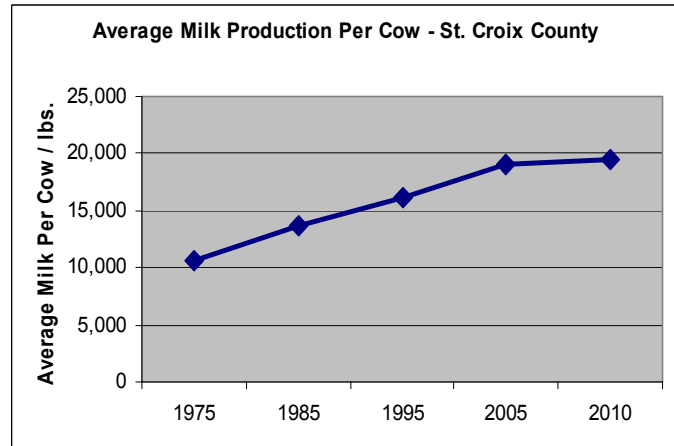
Source: National Agricultural Statistics Service

(Figure 7). This decrease of 93 million pounds equates to an 18 percent decrease in total milk production over 24 years. More recently, the County experienced a reduction of 12 million pounds (three percent) between 2003 and 2009. Despite these decreases, St. Croix County has continued to lead the region in milk production and in fact in 2009 was equal to Dunn County in milk production, the historical leader. These neighboring counties also experienced reductions in total milk production.

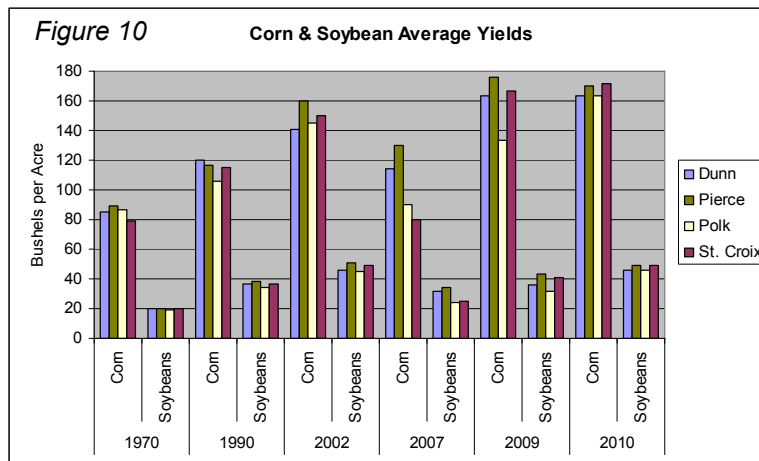
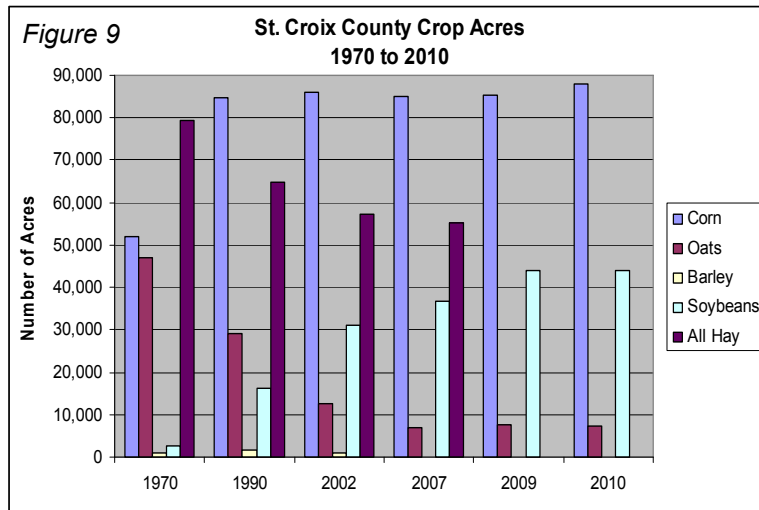
Figure 8 depicts St. Croix County's increase in average milk production per cow from 1975 to 2009. This is a result of industry changes including diet, genetics and management. These changes in the dairy industry are strongly influenced by federal policies, higher grain prices and economies of scale.

It should be noted that despite St. Croix County's dramatic population growth during this same timeframe, 1987 to 2009, the County has continued to be a regional leader in dairy production and farm income and agricultural sales.

Figure 8



Source: National Agricultural Statistics Service



Crops

Figure 9 depicts which crops were grown in St. Croix County from 1970 to 2010. Corn led the County in crop acres planted with 88,000 acres. There was a 70 percent increase in the amount of corn being grown from 1970 to 2010. However, from 1990 to 2010, the increase was a more modest 4 percent. Soybeans replaced oats as the second leading crop in the County, with 44,000 acres in production. The change in soybean production was the most significant; in 1970 there were virtually no soybeans grown in the county. As shown, the number of acres of oats decreased dramatically, with 7,200 acres in 2010 compared to 47,000 acres in 1970. Data was not available for barley and hay in recent years. Between 1970 and 2007, there was a decrease in the acres of hay. These shifts can be somewhat attributed to the decrease in livestock, especially dairy cows, in the County and region. But the

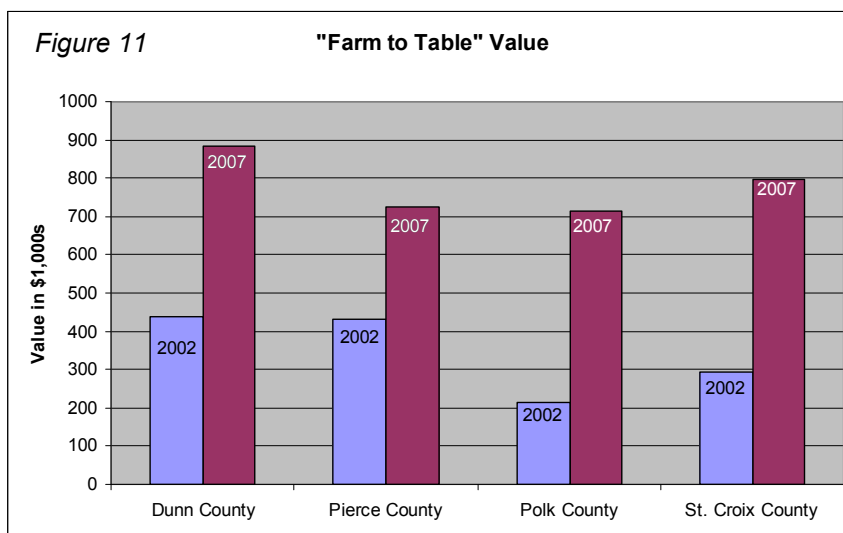
more significant impact is from federal policies and economic incentives for corn and soybean production and not oats, barley or hay crops.

In addition to looking at the total number of acres planted and harvested, another important aspect of total crops in the County is the yield generated. The average corn and soybean yield can be seen in Figure 10. Since 1970, the average yield per acre has increased by 100 percent for corn and 150 percent for soybeans. The increased yields are a result of advances in crop genetics, better farm management and improved planting, production and harvesting technology.

Direct Market Farms

Another trend occurring in St. Croix County and neighboring counties since 2000 is the increase in the number of farms marketing agricultural products directly to consumers. Producers are promoting the “farm to table” concept to improve profitability and capture the growing interest in fresher, healthier food alternatives. This trend has support from the University of Wisconsin Extension and Wisconsin Department of Agriculture, Trade and Consumer Protection with education and information provided to producers interested in trying direct farm marketing. The proximity of St. Croix County and neighboring counties, Dunn, Pierce and Polk, to the Twin Cities Metropolitan Area population base has also supported this trend. Even though the overall sales of direct market farms are still under five percent of the total county sales, this niche market is growing.

Figure 11 shows the increase in direct market agricultural products sold to individuals for consumption. Products include, but are not limited to, purchases from farmers’ markets, road side stands, and large meat orders. St. Croix County experienced a 173 percent increase in farm to table sales between 2002 and 2007. In fact, the entire west central part of Wisconsin experienced a substantial sales increase. In comparison, the statewide average sales increase was 50 percent. The number of direct market farms in the County increased from 112 to 136 farms from 2002 to 2007. Most of these farms are small, but larger operations are beginning to enter the market as well. These farms are producing food for the local/regional food market and selling large quantities to grocery stores and restaurants.



Source: National Agricultural Statistics Service

Organic Farms

In 2007, Wisconsin had 1,222 certified organic farms, ranking second in the nation. In comparison, Minnesota had 550 organic farms. Organic farming is a growing market, especially in areas like western Wisconsin with its close proximity to the Twin Cities Metropolitan Area population base. In 2007, St. Croix County had 24 organic farms and 2,179 acres of organic farmland an additional 10 farms were in the process of transferring to organic.

Agricultural Infrastructure & Agribusiness

As a whole, agricultural infrastructure related to dairy and crop farming has been significantly reduced in the County in the last few decades. Even one generation ago, most communities in St. Croix County had processing, storage and supply facilities. Many of these facilities have since closed. This reduction of agricultural infrastructure can be attributed to the increase in size and decrease in number of traditional agricultural operations and the increasing internet purchasing options. It is anticipated that the County will continue to experience a decrease in agricultural infrastructure. However, because there are fewer facilities, the rate of reduction will be slower than in the past.

The agriculture related businesses in the County include: seed, feed, chemical, implement, equipment repair, veterinary, greenhouse/nursery, meat and dairy processing and marketing, financial services and general farm supply. (Figure 12) Additional equipment, supply and processing businesses that serve St. Croix County are located in neighboring counties.

Figure 12

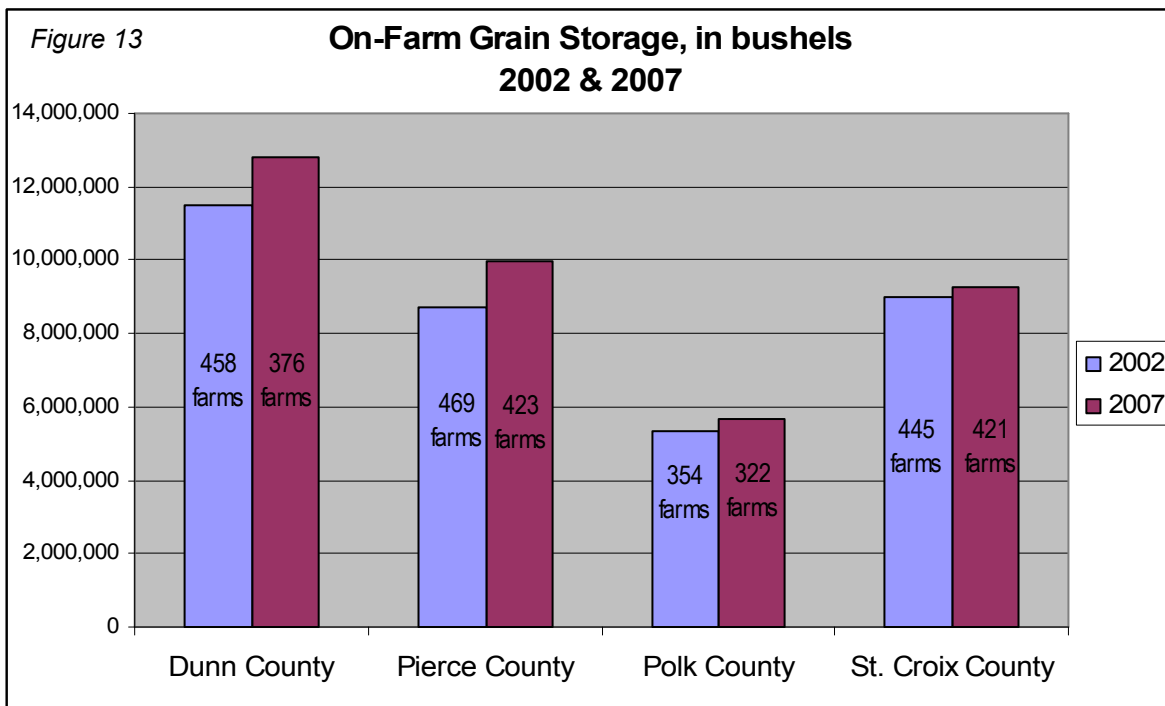
St. Croix County Agribusinesses - 1987 to 2007					
Type	1987	1992	1997	2002	2007
Agricultural Services	23	28	41	60	69
Animal Product Support	NA	NA	6	6	6
Veterinary	NA	NA	12	16	18
Landscape & Horticulture	NA	NA	23	38	45
Manufacturing	10	11	14	15	18
Food & Kindred	9	10	12	13	15
Farm/Garden Machinery	1	1	2	2	3
Wholesale Trade	17	19	21	18	12
Farm/Garden Machinery/Equipment	6	6	9	9	2
Farm Product Raw Material	NA	NA	3	4	3
Farm Supplies	11	13	9	5	7
Total Agribusinesses	50	58	76	93	99

Source: U.S. Census, County Business Patterns, 1978 – 2007

- From 1987 to 2007 total agribusiness services have doubled.
- The most significant increases have been in landscape and horticulture, veterinary, services and in food and kindred manufacturing.
- At the same time, the wholesale services for farm/garden machinery and equipment and supplies have decreased in number.
- The availability of equipment, parts and supplies through the internet and on-farm delivery has negatively impacted local businesses while expanding farm resources and opportunities.

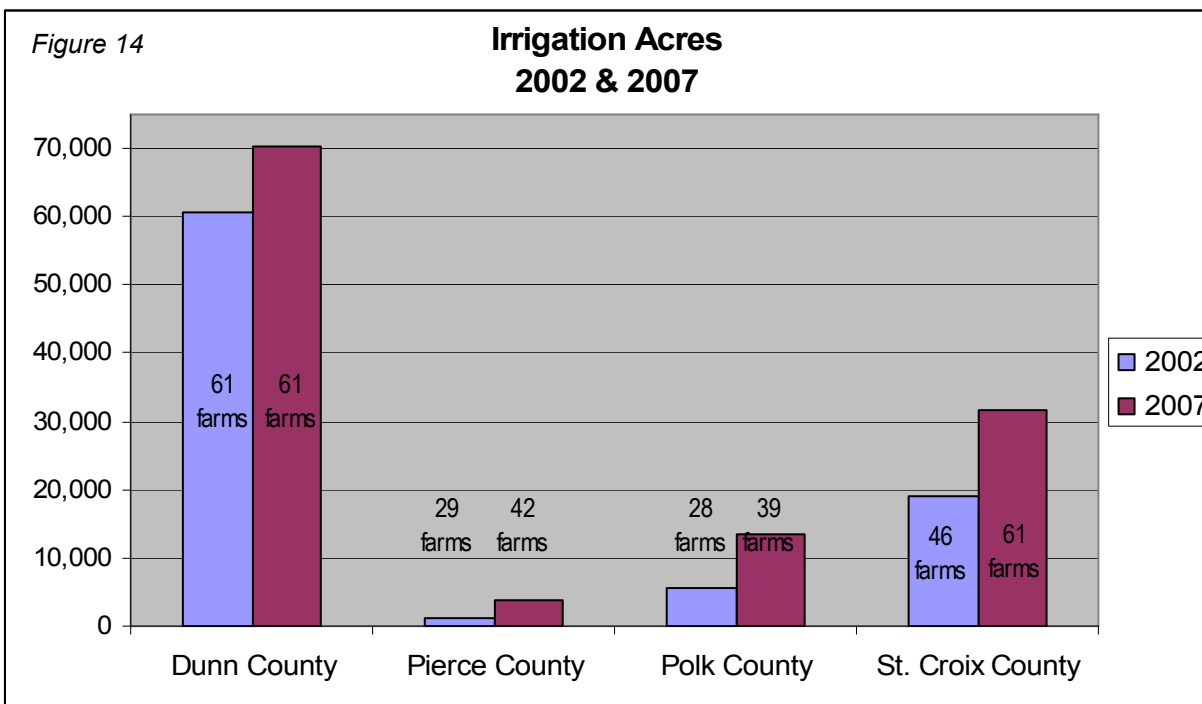
In recent years, agricultural storage facilities have been shifting to privately-owned, on-farm or regional facilities that are not located within St. Croix County. As the size of farms increases

this is expected to continue. Figure 13 shows the increasing number of bushels of grain being stored onsite, even when the number of farms doing so decreased between 2002 and 2007.



Source: Census of Agriculture 2002 & 2007

The use field irrigation is also increasing in St. Croix and surrounding counties as seen in Figure 14. This trend is expected to increase with the currently high commodity prices. (Figure 14)



Source: Census of Agriculture 2002 & 2007

LAND USE TRENDS

Perhaps the most noticeable changes in St. Croix County over the past two decades were land use changes, specifically around the cities and villages. The land use changes were mostly from agricultural land to residential land, but also included commercial and industrial development as well. Regardless of the location in the County, the majority of the new development was significantly different than developed land use patterns that were prevalent throughout St. Croix County over the last 100 years. The newer development often consisted of larger lots and much lower density levels. Due to Interstate Highway 94 traveling through the County, there has been an increase in commercial and industrial development that provides easy accessibility and services to traffic along the Interstate.

Urban Growth

Over the past several years, the definition of both “assessed agricultural land” and “farmland” in the various data collection forms, and the definition of what constitutes a farm, have changed to the point where it is challenging and oftentimes impossible to compare total farmland and the number of farms from previous years. A much more efficient way to examine how land use and the landscape have changed is to look at the changes in residential, commercial, and industrial acres. Figure 15 shows the increase in the total acreage of residential, commercial and industrial acres in St. Croix County from 1987 to 2010. The County has experienced a 140 percent increase in the total of these three land use types. This increase is equivalent to 55 square miles of growth in the County. Between 1997 and 2010, these land uses increased roughly 20,000 acres, the equivalent of 32 square miles. The land uses account for 15 percent of the assessed land in the County.

Figure 15

St. Croix County Land Use Acreage								
St. Croix County	Residential	Commercial	Manufacturing	Agricultural	Undeveloped	Forest/AG Forest*	Other	Total
1987	22,112	2,273	839	355,654	4,597	37,086	0	422,561
1997	35,300	3,529	1,072	320,494	4,702	48,319	3,569	416,995
2010	53,462	5,548	1,396	252,768	40,012	51,698	3,233	408,217

Source: Wisconsin Department of Revenue based on assessment records.
*Ag Forest was not a category in 1987 and 1997, Exempt and woodland acres are not included in these categories or the total.

From 1994 to 2009 there have been significant changes in how property is assessed in Wisconsin. Use value assessment, which was implemented between 1996 and 2000, shifted land uses from the agricultural real estate classification to the undeveloped (which was formerly swamp and waste), ag forest and ag buildings and sites (other) classifications.

Undeveloped land includes areas commonly called marshes, swamps, thickets, bogs or wet meadows. This class also includes fallow tillable land (assuming agricultural use is the land's highest and best use), road right-of-way, ponds, depleted gravel pits and land that, because of soil or site conditions, is not producing or capable of producing commercial forest products.

Although there seems to be a significant decrease in the amount of land in the agricultural real estate classification from 1994 to 2009, the actual amount was less because of the changes in how property is assessed.

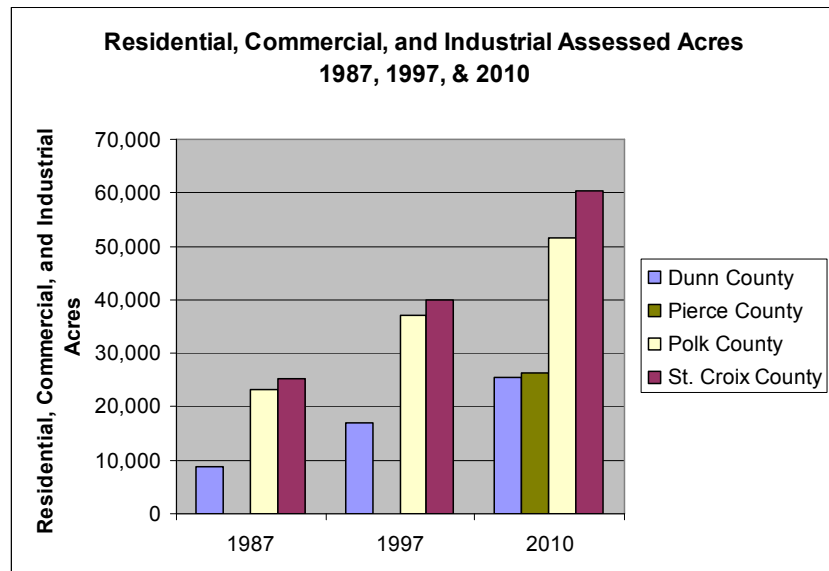
The effect of use-value assessment can be seen beginning in 1997 when agricultural land value went down and the agricultural buildings and sites category was added. Use-value has shifted the tax burden from agricultural land to the other assessment categories.

The “exempt acres” category generally includes all publicly-owned local, county, state and federal land and institutionally-owned land, such as churches. Exempt acres are exempt from assessment but not all of this land is exempt from taxes.

For instance, the WDNR provides payments in lieu of taxes to local communities each year. Woodland Tax or Managed Forest is another land classification not included in the general assessment categories, because it is taxed at a special reduced rate.

As seen in Figure 16, the expansion of residential, commercial and industrial assessed acres also occurred in surrounding counties; it should be noted that 1987 and 1997 data are missing for Pierce County.

Figure 16



When looking at the population projections of the County, the current trend of increasing residential, commercial, and industrial land uses is likely going to continue. Using the same assessed acres/person ratio that existed in 1997 and 2010, the projected 2035 developed land uses increase substantially: residential +64 sq/mi., commercial +7 sq/mi. and industrial +2 sq/mi.

Figure 17 shows total land use acreage by town, village, and city over more than two decades. The amount of land in St. Croix County’s towns has decreased by about 22,000 acres during that timeframe.

The villages and cities have grown by about 3,000 and 5,000 acres respectively in the same timeframe. Which indicates municipal expansion through annexation has removed approximately 8,000 acres from the towns.

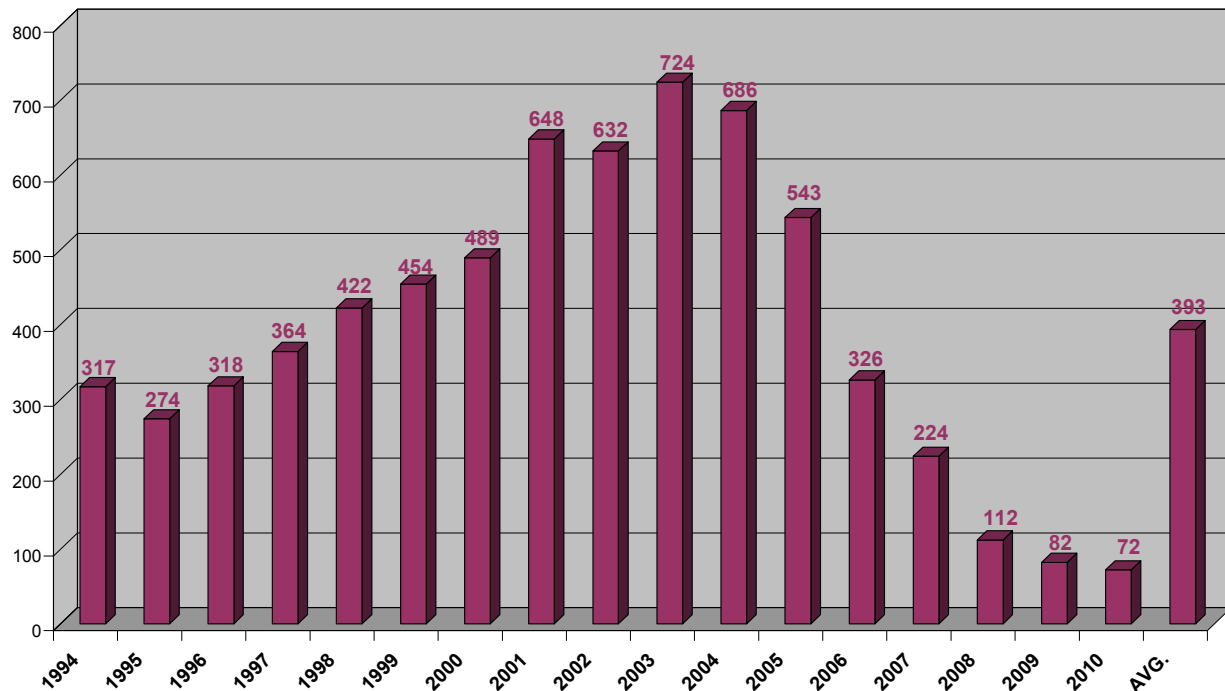
Figure 17

St. Croix County Total Land Use Acreage, by Municipality			
	1987	1997	2010
Town Total	416,851	410,609	394,506
Village Total	4,118	4,832	7,171
City Total	1,592	1,554	6,540
County Total	422,561	416,995	408,217
Source: Wisconsin Department of Revenue based on assessment records. Exempt and woodland acres are not included in these categories or the total.			

Since 2006, there has been an economic recession and a depressed housing market with numerous foreclosures and significantly less new housing. Figure 18 below shows new housing based on addresses issued in St. Croix County towns over the past 15 years. In 2010 new housing had reached its lowest point yet and could still be dropping.

Figure 18

Addresses Issued For New Construction



Source: St. Croix County Planning & Zoning Department.

In addition to decreased new housing activity, St. Croix County is also faced with numerous platted lots that have not been developed. Figure 19 provides information from St. Croix County's property records on the number of lots that have been created in each municipality since 2000 but which have no improvements on them. The numbers provided reflect 2008 assessment data. Lots may have been created or improved after the 2008 assessment. These lots represent approximately 7,000 acres of land available for immediate development.

As of 2008, there were 3,618 unimproved lots available for development in St. Croix County that had been created since 2000. The highest number of unimproved lots, 810, was found in the City of New Richmond, representing about 22 percent of the total supply. The Town of Richmond's 379 unimproved lots was the highest number for any town in St. Croix County and the second highest amount for any municipality. Richmond has a little over 10 percent of the total supply of unimproved lots in the county. Based on the estimated number of undeveloped lots and the historic rate of construction development, the county's supply of lots should last about nine to 10 years.

Figure 19

St. Croix County Unimproved Lots Developed From 2000 -- 2008		
MUNICIPALITY	LOTS	% OF TOTAL
Baldwin	3	0.08%
Cady	2	0.06%
Cylon	3	0.08%
Eau Galle	32	0.88%
Emerald	4	0.11%
Erin Prairie	14	0.39%
Forest	0	0.00%
Glenwood	4	0.11%
Hammond	332	9.18%
Hudson	176	4.86%
Kinnickinnic	31	0.86%
Pleasant Valley	15	0.41%
Richmond	379	10.48%
Rush River	2	0.06%
St. Joseph	136	3.76%
Somerset	242	6.69%
Springfield	8	0.22%
Stanton	0	0.00%
Star Prairie	135	3.73%
Troy	327	9.04%
Warren	40	1.11%
V. Baldwin	53	1.46%
V. Hammond	4	0.11%
V. North Hudson	40	1.11%
V. Roberts	100	2.76%
V. Somerset	166	4.59%
V. Spring Valley	1	0.03%
V. Woodville	59	1.63%
C. Glenwood City	5	0.14%
C. Hudson	283	7.82%
C. New Richmond	810	22.39%
C. River Falls	212	5.86%
St. Croix County	3618	100.00%

As will be discussed in the population section, it is often difficult to see exactly where people live in the County. *Figures 20 and 21* show population density by Census Block in 2000 and 2010, making it clearer which parts of the County have experienced population increases and changes in land use.

Source: St. Croix County Planning & Zoning Land Information, 2009.

Figure 20

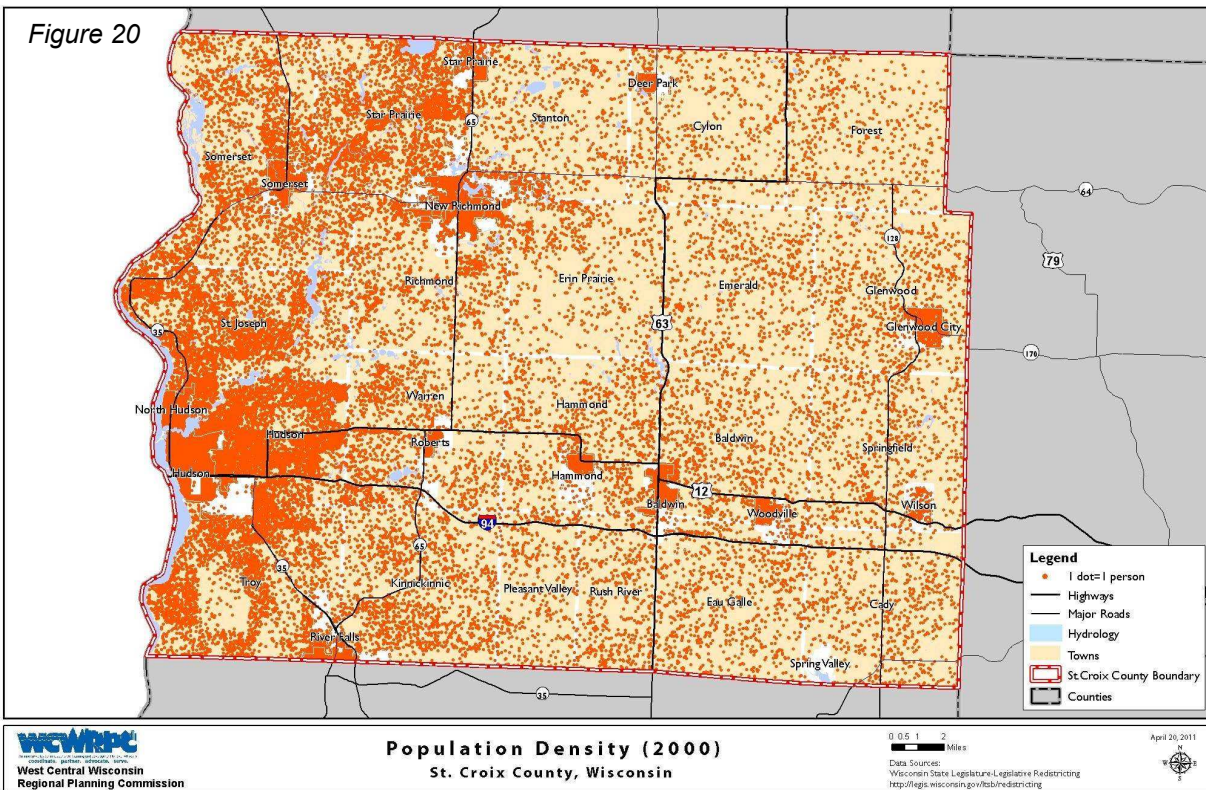
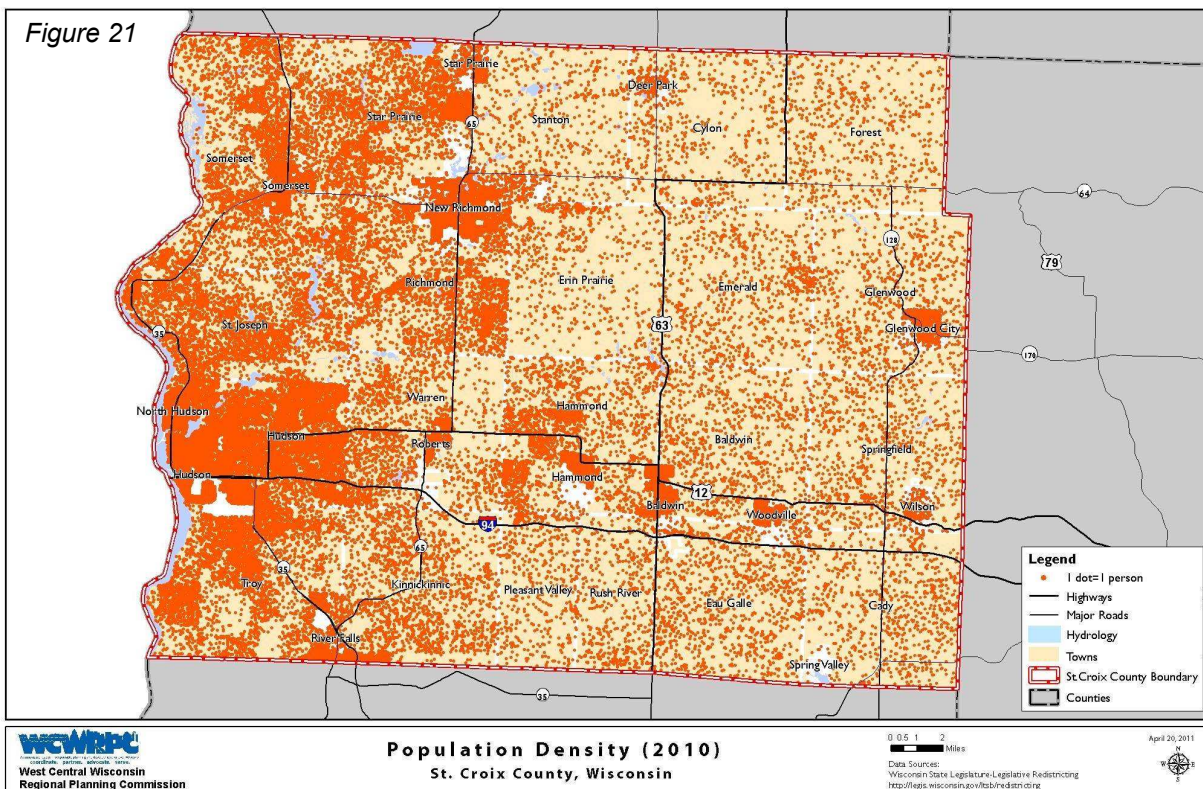


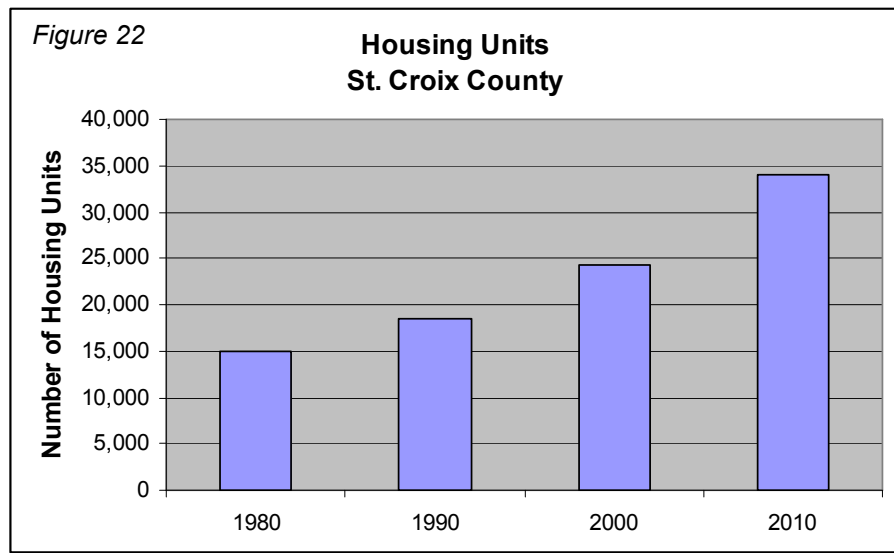
Figure 21



Housing

The number of housing units in St. Croix County has steadily increased in the recent decades. As seen in *Figure 22*, St. Croix County experienced a 128 percent increase in the number of housing units between 1980 and 2010. There were 14,924 units in 1980 and 33,983 units in 2010, an increase of 19,059 units. It is projected that by the year 2030 St. Croix County will contain 55,944 housing units, a 65 percent increase from 2010.

Several communities experienced significant increases in housing units between 1980 and 2010. They include the cities of Hudson (3587) and New Richmond (2019); villages of Baldwin (1046), North Hudson (799) and Somerset (784); towns of Hudson (2,172), Troy (1,024), Somerset (896), Star Prairie (786), Richmond (770) and St. Joseph (752). Table 2.1 in the *Housing* section of the County Comprehensive Plan lists the number of housing units by municipality in St. Croix County from 1980 to 2010. Demands for additional housing have resulted in the



Source: U.S. Census

conversion of large amounts of undeveloped land (crop, forested, pasture) into residential development in St. Croix County. More specific discussion of housing and household trends can be found in the St. Croix County Comprehensive Plan, *Housing* section.

Economic Growth & Business Development

Economic and business development trends and existing conditions are located in the Economic Development section and in the Conditions and Trends Report of the County Comprehensive Plan. As a whole, St. Croix County has a complex economy, has a wide range of important industries in both urban and rural areas, and is part of the Twin Cities Metropolitan Area. Regionalism and partnerships are taking an even more important role in creating a more dynamic economy and enhancing agricultural business development options.

There have been seven agricultural-related businesses that have received a total of nine loans from the Regional Business Fund, Inc., a regional revolving loan fund for a seven-county region, over the past five years. Most of these loans have been for farms that are moving towards incorporating renewable/sustainable energy sources into their operation. An example of this is the partnership between Emerald Dairy, in the Town of Emerald, and the University of Minnesota. This partnership revolves around a transition management facility the University uses for education and training of students, to conduct applied research and to evaluate the effects of various research studies in a commercial setting.

In the Agricultural Trends section of this report, one can find information relating specifically to the agriculture industry in St. Croix County. It is important to note a few general economic themes occurring in St. Croix County that may have some direct or indirect relation to farmland preservation:

- St. Croix County's economy is impacted by regional, state, national and international decisions and fluctuations. At the State level, growth has slowed, while the price of gas and commodities has inflated. Home purchases and new home construction in Wisconsin have decreased in recent years. Wisconsin's June 2011 foreclosure rate of 1 in 818 homes is less than Minnesota's rate of 1 in 673 homes and the nation's 1 in 583. However, St. Croix County has experienced a higher rate of foreclosures than the majority of counties in Wisconsin.
- There is increasing demand for skilled workers in the region. Post-secondary educational attainment of County residents is significantly above the State average but lower than Twin Cities MSA levels, with 91.6 percent of residents completing high school or having some type of post-secondary education. At this time, there are displaced and disconnected workers in the County.
- Only 18.7 percent of the County's resident labor force works within the community in which they live. With 43.8 percent of the resident labor force working outside the State, average travel times to work have been increasing.
- Food service occupations are expected to have one of the greatest total number of job increases in the region from 2004 to 2014.
- As of 2000, only 5.2 percent of St. Croix County jobs were in farming, of which 82.7 percent were sole proprietors.
- The primary occupation of St. Croix County farmers changed between 2002 and 2007. In 2002, 941 farmers had "farming" as their primary occupation. This number dropped to 747 in 2007. This is a 21 percent drop. The farmers that had "other" as their primary occupation increased from 923 to 1,061 between 2002 and 2007, a 15 percent increase.
- There has been an increase in immigrant agricultural workers in the County. These workers, who are primarily Hispanic, are both documented and undocumented. This increase in immigrant agricultural workers has created issues regarding housing, education in the school districts, and societal integration into local communities.

It is clear when looking at the above facts about St. Croix County's economy, along with information provided in this report about population and housing that St. Croix County's labor force will inevitably increase in the future. The need to fill jobs and accommodate new workers will result in further growth pressures on the County's farmland.

POPULATION TRENDS

St. Croix County has experienced the highest percentage of population increase of any county in Wisconsin over the past 20 years. Growth has not been limited to the County's cities and villages; population growth in rural areas has occurred throughout the County as well. The most dramatic population increases have happened in the western half of the County and in communities along Interstate Highway 94 and U.S. Highway 12. The population increase has resulted in growth pressures and has impacted land use in the County.

Figure 23 shows the percent of population that lived in a town (not a city or village) in 1970 and 2000 in St. Croix County as well as neighboring counties. As can be seen, the percent of population in St. Croix County that lived in towns stayed relatively the same from 1970 to 2000 (51.2 percent vs. 51.7 percent). However, in 1970, 22.8 percent of the County's population lived on a farm in a town. In 2000, this percent dropped to 4.5 percent. Thus, 47.2 percent of the County's 2000 population lived in a non-farm residence in a town.

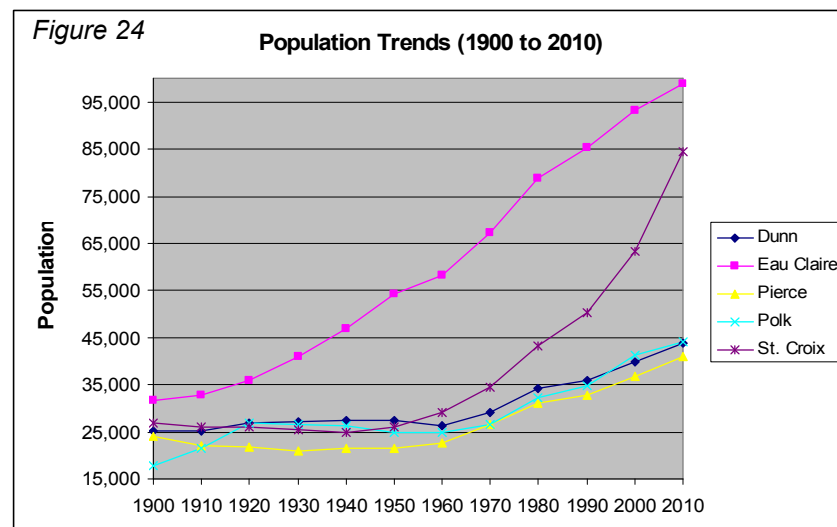
With the large increase in population between 2000 and 2010 and the number of farms being relatively stable (~1,850), it is anticipated that Rural Non-Farm population will increase when the 2010 Census data is released. In addition, and just as important, some of the new Rural Non-Farm population will be from urban areas where they are not accustomed to living in close proximity to agricultural operations. This change increases potential conflicts between farmers and non-farmers, such as odor, traffic, and noise.

Figure 24 shows the population increase in several counties over the past century. Except for Eau Claire County, all four counties had roughly similar populations earlier in the 20th century until 1970. Starting in the 70's, St. Croix County began to grow at an increasingly faster rate than the surrounding counties. Since 1980, St. Croix's population has accelerated, reaching almost 85,000 people in the 2010 Census. By 2035, it is projected that the County will have over 148,000 people (25,000 more than Eau Claire County). By contrast, Dunn (+12,000), Pierce (+13,000), and Polk (+16,000) counties will experience smaller

Figure 23

Farm & Rural Non-Farm Population		
County	% of 1970 Population	% of 2000 Population
Dunn		
Farm	27.1	7.3
Rural Non-Farm	23.2	44.6
Pierce		
Farm	N/A	6.9
Rural Non-Farm	N/A	38.5
Polk		
Farm	31.4	5.6
Rural Non-Farm	31.3	58.5
St. Croix		
Farm	22.8	4.5
Rural Non-Farm	28.4	47.2

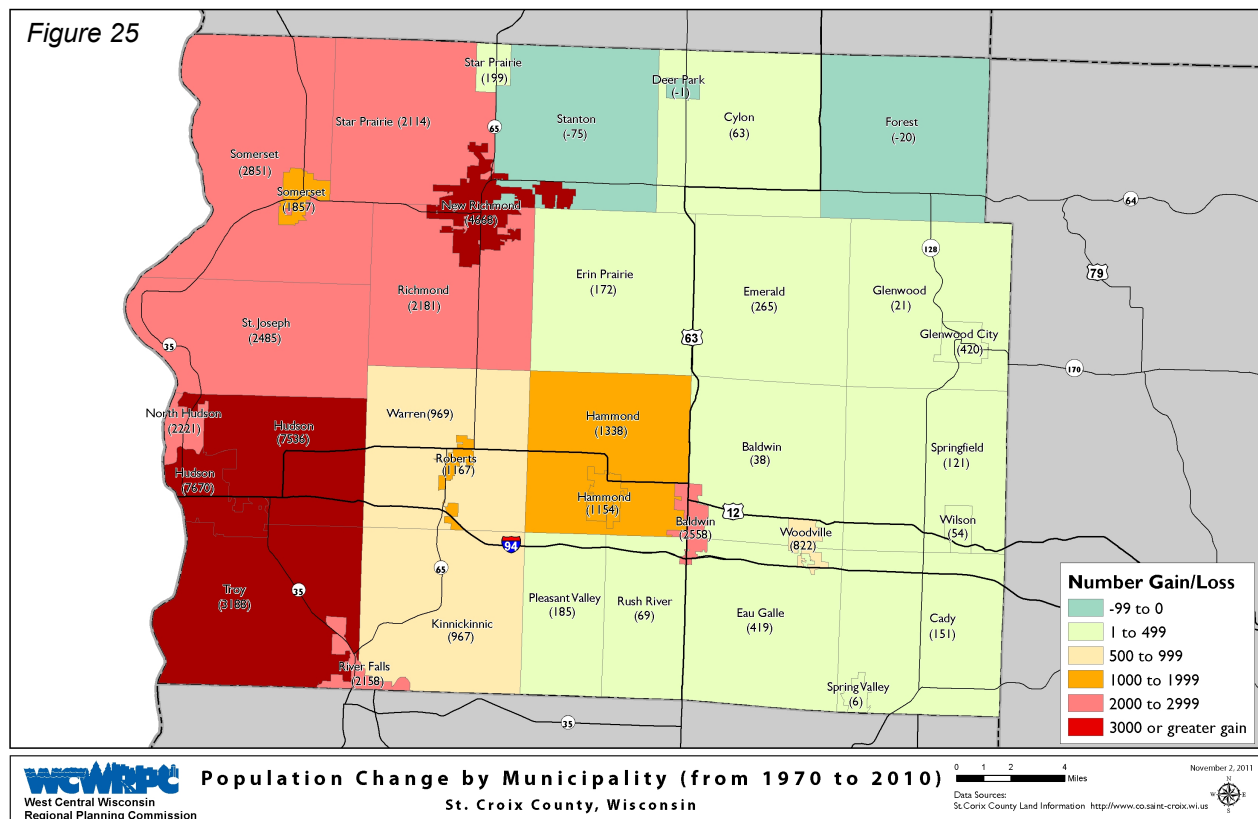
Note: Town is defined as not in a city or village.
Source: U.S. Census



Source: U.S. Census & Wisconsin Dept. of Administration

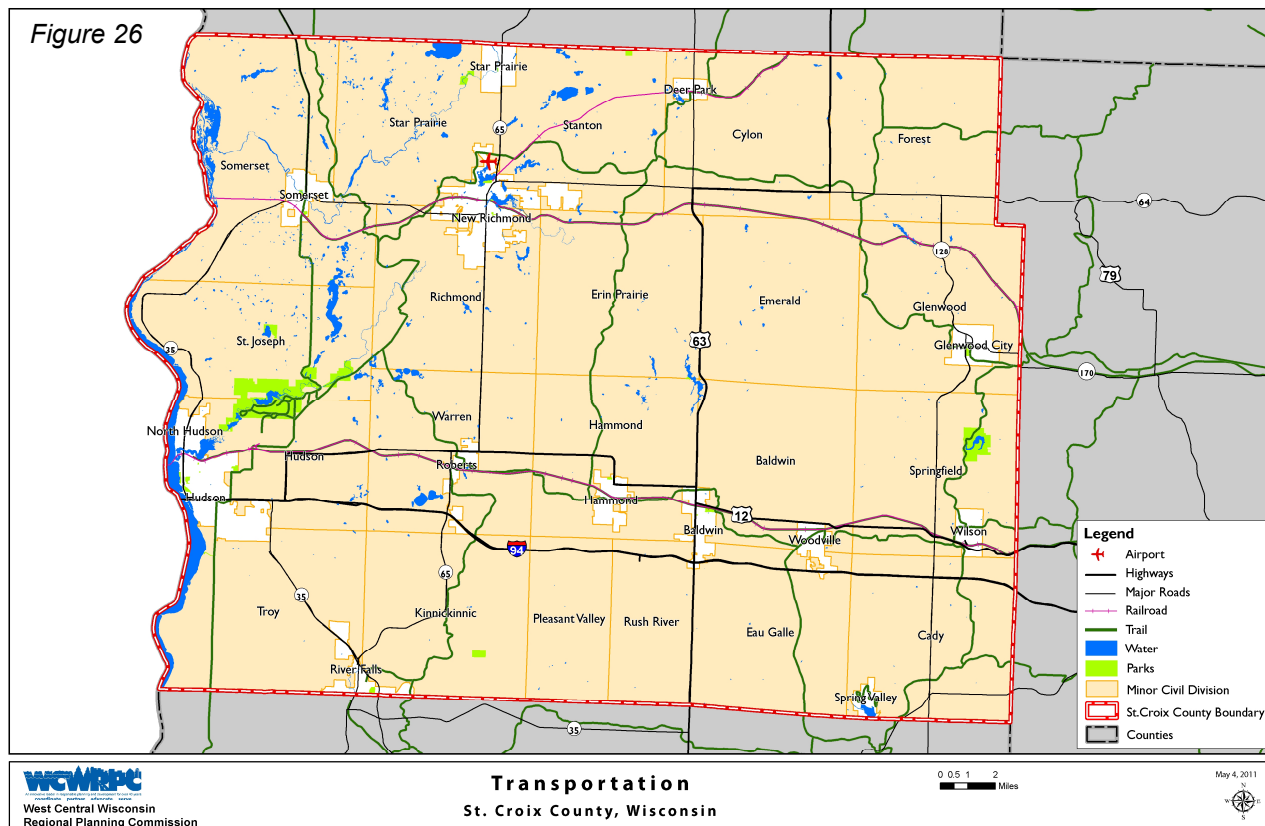
increases in population between 2010 and 2035.

Figure 24 illustrates the change in population growth for the region. However, that type of graph does not show where in a county that growth has occurred. *Figure 25* depicts which cities, villages, and towns have changed in population from 1970 to 2010. It identifies the larger population gains in the western half of St. Croix County and in cities and villages along the Interstate Highway 94 corridor. It shows how all of the towns in the eastern half of the County experienced a growth of no more than 499 people. It also shows the towns of Forest and Stanton and the Village of Deer Park lost population during this 40-year timeframe. Table 1.3 in the *Issues and Opportunities* section on pg. XX displays population and population change from 1960 to 2010, by municipality.



TRANSPORTATION TRENDS

Transportation facilities, which include highways, rail, airports, bike facilities, pedestrian facilities and transit, have a significant influence on land use, development and quality of life for St. Croix County residents (*Figure 26*). A well-maintained and planned transportation system can support a variety of land uses, facilitate the provision of various public services, as well as provide linkage among residents, agricultural producers, manufacturers and businesses. Therefore, in order to ensure safety and efficiency of the transportation system, identifying the County's existing and proposed road network and figuring out major transportation needs should be evaluated for potential impacts on farmland and agricultural businesses.



Highways

St. Croix County is served by 1,925 miles of roads under state, county and local jurisdiction. Major north/south highways include WIS 35, WIS 65, US 63, and WIS 128. Interstate Highway 94, US 12, and WIS 64 are major east/west highways. Traffic on the Eau Claire-Hudson portion of the Interstate, which runs through St. Croix County, has been growing significantly. This stretch of Interstate 94 experiences traffic volumes of 40,000 to 70,000 vehicles a day and is the second most-traveled segment of interstate highway in the State of Wisconsin. By 2020, average daily traffic volumes at the I-94 bridge over the St. Croix River are projected to exceed 85,000 vehicles per day. Various construction and repair projects are planned for the State highways in St. Croix County between 2008 and 2013. A total of 102 miles are scheduled for improvement over this six-year period.

Designated Truck Routes/Agricultural Equipment

Truck routes are designed to accommodate semi-trucks and include roadside accommodations at rest areas for temporary parking. Long truck routes also often include private truck parking and fueling stations along the routes.

The following highways are designated as long truck routes in St. Croix County:

- Interstate 94 (all)
- US 63 (all)
- WIS 35 (River Falls to Hudson)
- WIS 64 (New Richmond to east)
- WIS 65 (River Falls to New Richmond)
- WIS 128 (WIS 29 to WIS 170/Glenwood City)
- WIS 170 (WIS 128 to Boyceville)

These additional highways, or portions thereof, are restricted truck routes, such as US 12, WIS 29, and parts of WIS 35, 64, 65, 79, and 128. No County highways are designated truck routes.

Agricultural equipment for farming needs to utilize state, county and town roads to access fields. Operating farm vehicles on Wisconsin roads involves a specific set of regulations, safety and other requirements. Specific rules regarding length, height and width of agricultural equipment; driver requirements; hazardous materials; safety and vehicle registration; and weight restrictions can be found on the WisDOT website at:

<http://www.dot.wisconsin.gov/statepatrol/inspection/farm.htm>.

Farmers are not exempt from highway weight restrictions except during harvest time. Wisconsin Statutes §348.17(5) annually lifts weight limits on Class A highways from September 1 to November 30 to harvest corn, soybeans, potatoes, vegetables or cranberries. The law allows weight limits to be exceeded by up to 15 percent for transport from farm field to initial storage or initial processing point. Farmers must meet all other vehicle requirements for size, operation and driver qualifications, and cannot travel on roadways or bridges with special weight restrictions or on most interstates.

Equipment operators are encouraged to drive in a courteous, law-abiding manner and respect local weight limits whenever possible. Non-agricultural vehicle operators are encouraged to respect agriculture's right to utilize roadways, follow safe passing signs and also drive in a courteous and law-abiding manner. Farm-equipment signage for areas with the greatest use would be helpful in warning vehicles of possible slow-moving or parked equipment on highways. Education and information access are also important.

Railroads

Rail service is an important component of the agricultural market. Access to rail transportation allows different products to be more efficiently shipped and distributed. Two active rail lines traverse the County, Union Pacific and Wisconsin Central Limited railroads.

With the future growth in the County, issues regarding agricultural transport are likely to increase, especially safety and efficiency concerns. Driveway access to agricultural land and adequate roadway development should be addressed.

Additional information regarding these and other transportation facilities in the County is found in the Transportation Section of the St. Croix County Comprehensive Plan.

INFRASTRUCTURE & COMMUNITY FACILITIES TRENDS

Utilities, Sanitary Sewer & Wastewater Treatment

Utilities, sanitary sewer, and wastewater treatment provide the foundation, on which a community is built and maintained, and contribute to the quality of life in St. Croix County. The location of a community's utilities, sewer and wastewater treatment facilities will affect future growth and development in the County. Currently, there are 14 St. Croix County communities that have collection and treatment facilities for the proper treatment of wastewater, which includes three sanitary districts. See the Utilities Community Facilities section of the County Comprehensive Plan.

Nearly all development in St. Croix County that is not located in a city, village or sanitary district uses private on-site sewer systems. However, St. Croix County does not allow the use of holding tanks for new construction and has groundwater contamination prevention language because of the high susceptibility of pollution in some areas due to the unique karst and glacial topography.

Water Supply

Agricultural practices can have an impact on ground and surface water. In many cases, chemicals (fertilizers and pesticides) that are used in agricultural operations, manure, and sedimentation can impact water quality above and below the ground. This can have a significant impact on drinking water and habitat.

St. Croix County communities receive their water from groundwater sources including drilled wells and dug wells. St. Croix County's unique subsurface geology increases the susceptibility of groundwater contamination in some areas. Old, unused wells and karst land features such as sinkholes, exposed bedrock, springs and disappearing streams and ponds can act as direct conduits for polluted runoff to enter the groundwater. The Utilities and Community Facilities and Natural Resources sections of the County Comprehensive Plan have more detailed information.

Cities and villages in the county are served by municipal water systems, except for the Village of Deer Park. It is the only incorporated area without a municipal water system. The eleven non-municipal community water systems are trailer courts. St. Croix County residents in the remaining unincorporated areas depend on individual private wells for their water supply.

The quality of groundwater in St. Croix County is generally very good with some exceptions:

- The Wisconsin DNR has designated specific areas in the towns of Hudson, Star Prairie and Warren as "deep-well casing areas" due to identified groundwater contamination.
- The WDNR has also identified two areas in Emerald as "special areas of well compensation eligibility" due to evidence of *Rhodococcus* bacteria, an ecoli-positive bacteria. Microbial-source testing (which determines the specific type of bacteria) is available through the Wisconsin-DNR for those wells that have both obvious odors or smells and tested positive for e-coli bacteria.
- There are now four Atrazine (an herbicide) prohibition areas within St. Croix County. One on the edge of Star Prairie and Stanton; one in Erin Prairie; one in Springfield; and one at the junction of the towns of Hammond, Warren, Pleasant Valley and Kinnickinnic.
- Continuing Nitrate concentrations in the water are localized but are becoming more of a problem throughout the county.

A report entitled An Introduction to Groundwater in St. Croix County completed in May 2006 by the UW-Extension and UW-Stevens Point provides a more complete analysis of St. Croix County's groundwater. The report looks into a broader range of water quality measurements such as coliform bacteria, arsenic, nitrates, triazine, arsenic, chloride, hardness and pH. The report may be accessed on St. Croix County's website, under the Land and Water Conservation Department's Drinking Water program, www.sccwi.us/lwcd choose Drinking Water Testing.

The hazard materials incidents section of the St. Croix County All Hazards Mitigation Plan also discusses the key groundwater contamination concerns in St. Croix County. The preponderance of closed depressions in the County significantly increases these risks as contaminants at the surface may not be given the opportunity to be adequately filtered by soils, but, instead, are passed more directly from the surface to the aquifer. The USGS is also currently completing a groundwater modeling effort which includes St. Croix County.

Communications

In broad terms, telecommunications facilities allow users to communicate and share data over long geographic distances. Access to wireless, seamless communication networks is becoming increasingly important in the modern world. Due to the increase in use of wireless communication for public safety, business, and personal use, constructing telecommunication towers is an issue that many municipalities are addressing more often than in the past. St. Croix County has adopted a wireless communications ordinance as part of Chapter 17 of its Code of Ordinances. Most of St. Croix County has access to broadband (high-speed) Internet via telephone or cable lines, though some gaps do exist. As an alternative, some of these areas may have broadband access via other means (e.g., satellite).

Access to telecommunications facilities is becoming more important for farmers and others working in the agriculture business. As with any business owner, having accessible information on new programs, policies and innovative strategies will only help expand one's business.

Community Facilities & Services

St. Croix County residents are served by a wide assortment of community facilities and services at the local and facility level. Communities in St. Croix County are served by seven private schools, twenty-five public schools, nine public libraries, and nine clinics and hospitals. Given that the County is increasing in population, some corresponding increases in the level of services can be anticipated. Although these facilities are mainly located in urban areas, an increase in community facilities poses a threat to existing farmland and undeveloped areas.

Energy

The abundance of farmland and natural areas in St. Croix County provide opportunities in the growing renewable energy and bio-energy industries. St. Croix County industries, public entities, farms, and individuals are utilizing farmland and other natural areas to profit from and/or conserve resources by manufacturing renewable energy and bio-energy. According to the 2007 Census of Agriculture, seven agriculture operations were generating energy or electricity on the farm. This trend is expected to continue to grow as energy costs increase. Two of these renewable energy projects are biogas production on farms. The Emerald Dairy biogas operation was installed in 2005 and has 110KW capacity. The energy produced is used onsite. The Baldwin Dairy biogas operation was installed in 2006 and has 200KW capacity. The energy produced is used onsite and to power a greenhouse and aquaponics operation across the road from the biogas site.

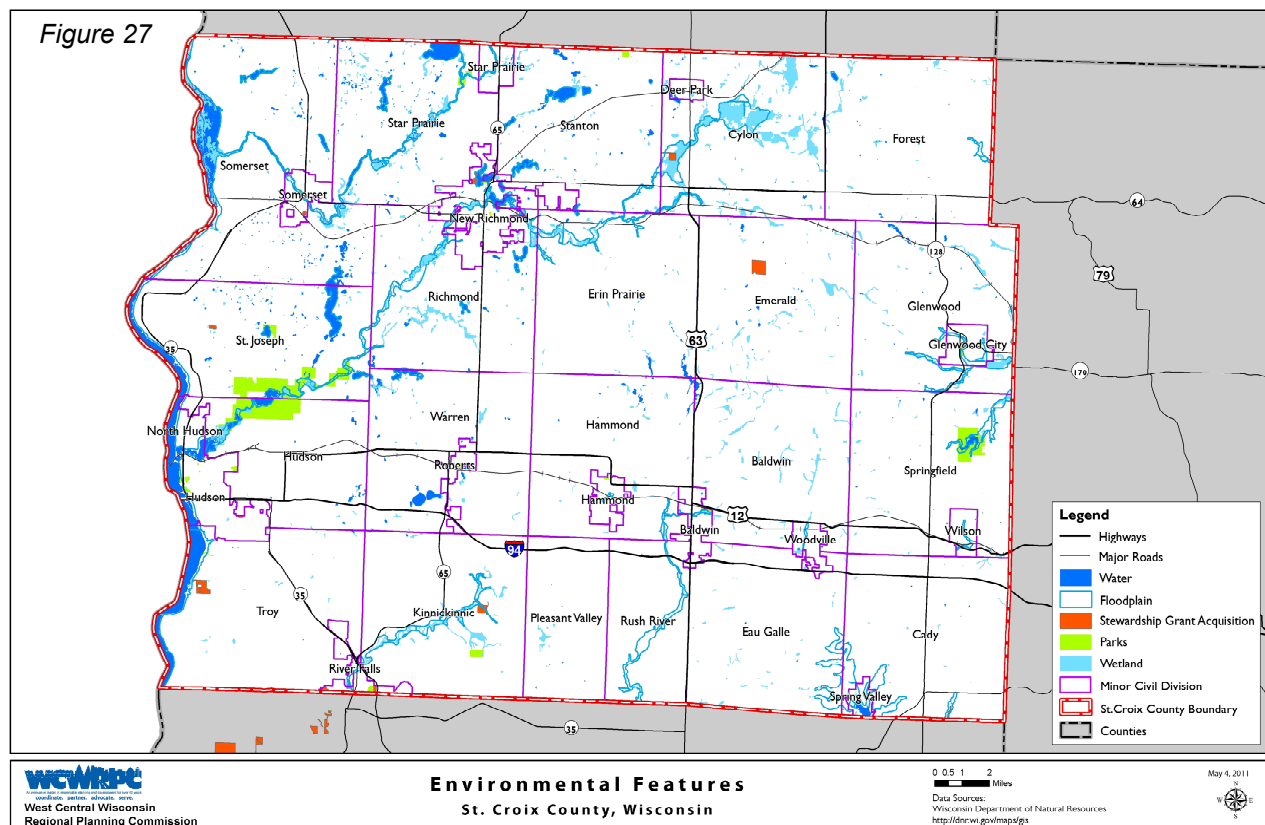
Waste Management

In St. Croix County, waste management and collection services are provided by private local waste haulers. St. Croix County assists local municipalities in operating their recycling programs; provides education and information to the public; manages, disperses funds and completes reporting on grant programs; and holds special collections throughout the year for household and agricultural hazardous wastes, tires, appliances, electronics, toner cartridges and cell phones. Additional information regarding waste management in the County can be found in the County Comprehensive Plan.

ENVIRONMENTAL PRESERVATION TRENDS

Environmentally sensitive and valued land resources should be considered for the potential impacts of growth on agricultural activities. Development policies and management techniques need to be established to assess the desired impacts on these resources. See the Natural Resources section of the County Comprehensive Plan.

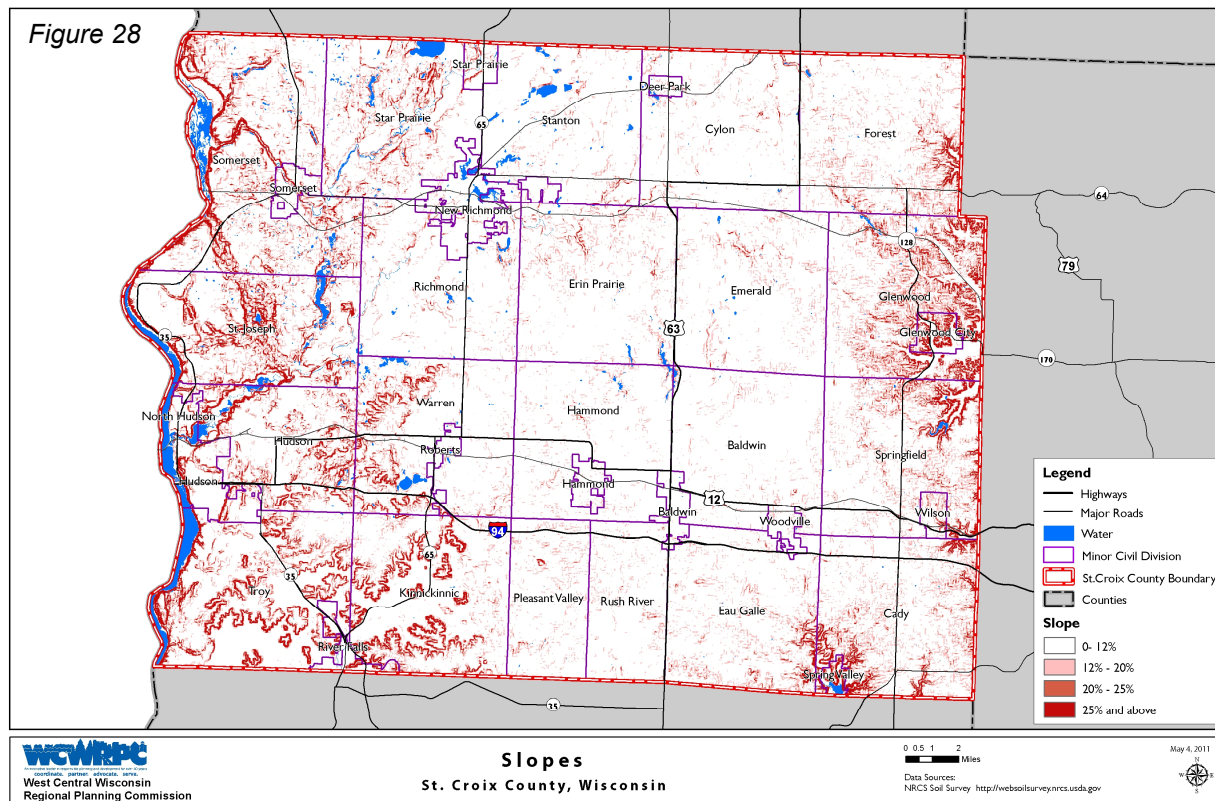
Figure 27 identifies floodplains, wetlands, water bodies, and parks in St. Croix County.



Slope

It is generally more desirable, both environmentally and economically, to avoid steep slopes and disruption of natural drainage ways with construction and land development. Steep slopes are any areas where the gradient of the land is 12 percent or greater (each percent of slope is measured as one unit in elevation for every 100 horizontal units). Areas having steep slopes can be categorized into three levels: 12 percent to 20 percent slope, 20 percent to 25 percent, and 25 percent and greater (Figure 28). St. Croix County has policies that limit growth and

development on land that has steep slopes. These policies can be found in the County Zoning and Subdivision ordinances.



Based on the Soil Survey for St. Croix County, there are 78,100 acres that potentially have a slope of 12 percent or greater representing 9.8 percent of the total land base. Of this, 12,700 acres (1.9 percent) have slopes of 20 percent or greater and 3 percent have a slope of 25 percent and greater. The majority of these steep slopes are located in the western and east central portions of the county. These relief changes can be seen in Figure 28. Additional localized and site-specific variations in topography and slope may exist. Glacial activity created scenic topography in the county, but that topography may be very sensitive to development activities.

Watershed

A watershed is an area of land that drains or “sheds” its water to a lake, river, stream, or wetland. The surface waters of St. Croix County fall within two major drainage systems - the St. Croix River Basin and the Lower Chippewa River Basin. As a whole, both urban and agricultural land uses should try to severely limit the amount of runoff from a property.

Surface waters in the western two-thirds of the County, including the Apple, Kinnickinnic, and Willow Rivers, fall within the St. Croix River Basin. The eastern third of the County, including the Hay and Eau Galle Rivers, are part of the Lower Chippewa River Basin. The exception is the Rush River in the south-central part of the County, which flows directly into the Mississippi River.

In general, the water quality in the Lower Chippewa River Basin and St. Croix River Basin is a concern. The major concern is from added nutrients and sediment from run-off, primarily from agricultural land and urban areas. The basins include the following watersheds: Trout Brook,

Lower Apple River, Lower Willow River, Upper Willow River, Kinnickinnic River, South Fork Hay River, Rush River, Eau Galle River and Wilson Creek watersheds. Surface and ground water quality can be affected by a wide variety of point and non-point sources, including agricultural run-off, stormwater from parking lots and roads, soil erosion and spills of hazardous materials. The risk of water contamination increases as development occurs. Sources and risks of contamination are important for individual communities to consider as they develop local land use and natural resources goals and strategies for their respective communities. Communities may select to participate in or support existing County or State programs to protect their water resources or implement local educational or regulatory programs.

Soils

Soil properties are an important factor in how land is used. Soils determine how productive farmland is, and the type and amount of development that can be reasonably supported based on the various soil characteristics. Subsequently, identifying and reviewing soil suitability interpretations are essential for determining the most suitable land use for farmland preservation.

Prime farmland is the land that is best suited to food, feed, forage, fiber, and oilseed crops. It may be cultivated land, pasture, woodland or other land, but it is not existing urban and built-up land, or water areas. The soil qualities, growing season, and moisture supply are factors needed for a well-managed soil to produce a sustained high-yield of crops in an economic manner. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment. Historically, soils that fall into classes I, II, and III of the Soil Conservation Service's capability unit classification system are considered prime agricultural lands. The value of these lands for agriculture is associated with not only their soil class, but also with their size, present use and any regulatory framework for their protection.

The United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), in establishing a uniform, national identification of productive farmlands, created a soil classification system that categorizes soils by their relative agricultural productivity. There are two categories of highly productive soils; national prime farmland and farmland of statewide significance. National prime farmland is well suited for the production of food, feed, forage, fiber and oilseed crops, and has the soil qualities, available moisture and growing season required to produce economically sustained high yields of crops when properly managed. Farmland of statewide significance are those lands, in addition to national prime farmland, which are of statewide importance for the production of food, feed, forage, fiber and oilseed crops. Soils that fall into classes I, II, and III of the Natural Resources Conservation Service's capability unit classification system are considered prime agricultural lands.

In 1981, NRCS developed a new system for evaluating agricultural lands, "Land Evaluation and Site Assessment," (LESA) which uses more detailed considerations of soil capability and potential yields, and provides for the assessment of factors beyond soil productivity in the determination of agricultural potential. The system is now widely used throughout the U.S. The LESA system presents the opportunity to define agricultural lands that have the most production potential.

Land Evaluation & Site Assessment for Agriculture

The Land Evaluation and Site Assessment (LESA) system is a point-based approach that is generally used for rating the relative value of agricultural land resources. In basic terms, a given LESA model is created by defining and measuring two separate sets of factors. The first set, Land Evaluation, includes factors that measure the inherent soil-based qualities of land as they

relate to agricultural suitability. The second set, Site Assessment, includes factors that are intended to measure social, economic and geographic attributes that also contribute to the overall value of agricultural land. While this dual rating approach is common to all LESA models, the individual land evaluation and site assessment factors that are ultimately utilized and measured can vary considerably, and can be selected to meet the local or regional needs and conditions a LESA model is designed to address. The LESA methodology lends itself well to adaptation and customization in individual states and localities. Also in addition to ranking soils for agricultural potential, the LESA system can provide a systematic and objective way to evaluate and numerically rank soils for their relative value for any specific use.

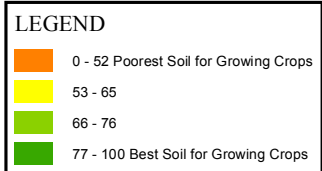
The Land Evaluation and Site Assessment (LESA) system is an analytical tool used to assist decision makers in comparing agricultural sites based on their agricultural value. The LESA system provides an objective and consistent tool to aid decision-makers in evaluating the relative importance of specific sites for continued agricultural use. In this sense, it is a tool for determining the best use of a site. While in some cases the best use may be some type of development, there are many other situations where the best use is to remain in agriculture. Also, there may be instances where the land is not suitable for agriculture, but neither is it a suitable location for development. In such situations, the LESA system is a valuable tool for determining the use with the least detrimental impact to the environment, economy and aesthetics.

As noted, there are two components to the LESA system; the Land Evaluation (LE) portion of the system, which is based on soils and their characteristics, and the Site Assessment (SA) portion of the system, which rates other attributes affecting a site's relative importance for agricultural use. The Land Evaluation portion is generally stable and unchanging because the soils change very slowly over time and the data relative to those soils takes a long time to accumulate. The Site Assessment is dynamic and changes on a continual basis because there are regular changes in development, property ownership, roadway improvements, sewer expansions, etc. happening throughout an area.

A system was developed for St. Croix County by a committee consisting of members of the former Land and Water Conservation and Planning and Zoning committees; citizens; town officials; county staff from the Land and Water Conservation, UW-Extension and Planning and Zoning departments; and NRCS staff. It was further refined by the Community Development Committee members.

St. Croix County has used the Land Evaluation and Site Assessment (LESA) system to compare agricultural lands based on their agricultural value. The Land Evaluation (LE) rating reflects the soil productivity potential, as well as some of the economic and environmental costs of producing a crop. Many physical and chemical soil properties are considered in the LE rating, either directly or indirectly, including soil texture and rock fragments, slope, wetness and flooding, soil erodibility, climate, available water capacity, pH (alkalinity versus acidity), and permeability. Three soil property indexes are combined to produce the LE soil component rating, Productivity Index for corn and alfalfa, Land Capability Class and National Prime Farmland. This produces a rating that reflects the most important soil considerations for agricultural use in St. Croix County. Possible LE ratings range from 0 to 100. Higher ratings means the soil has greater value for agriculture use. Please see St. Croix County's LESA System, Appendix B for more details. As shown in Figure 29, the dark and light green soils represent the most valuable soils for agriculture use while the yellow and orange ones indicate the least value.

Land Evaluation Quality of Soils for Crops



St. Croix County, Wisconsin
Land Evaluation and Site Assessment:
LESA Program

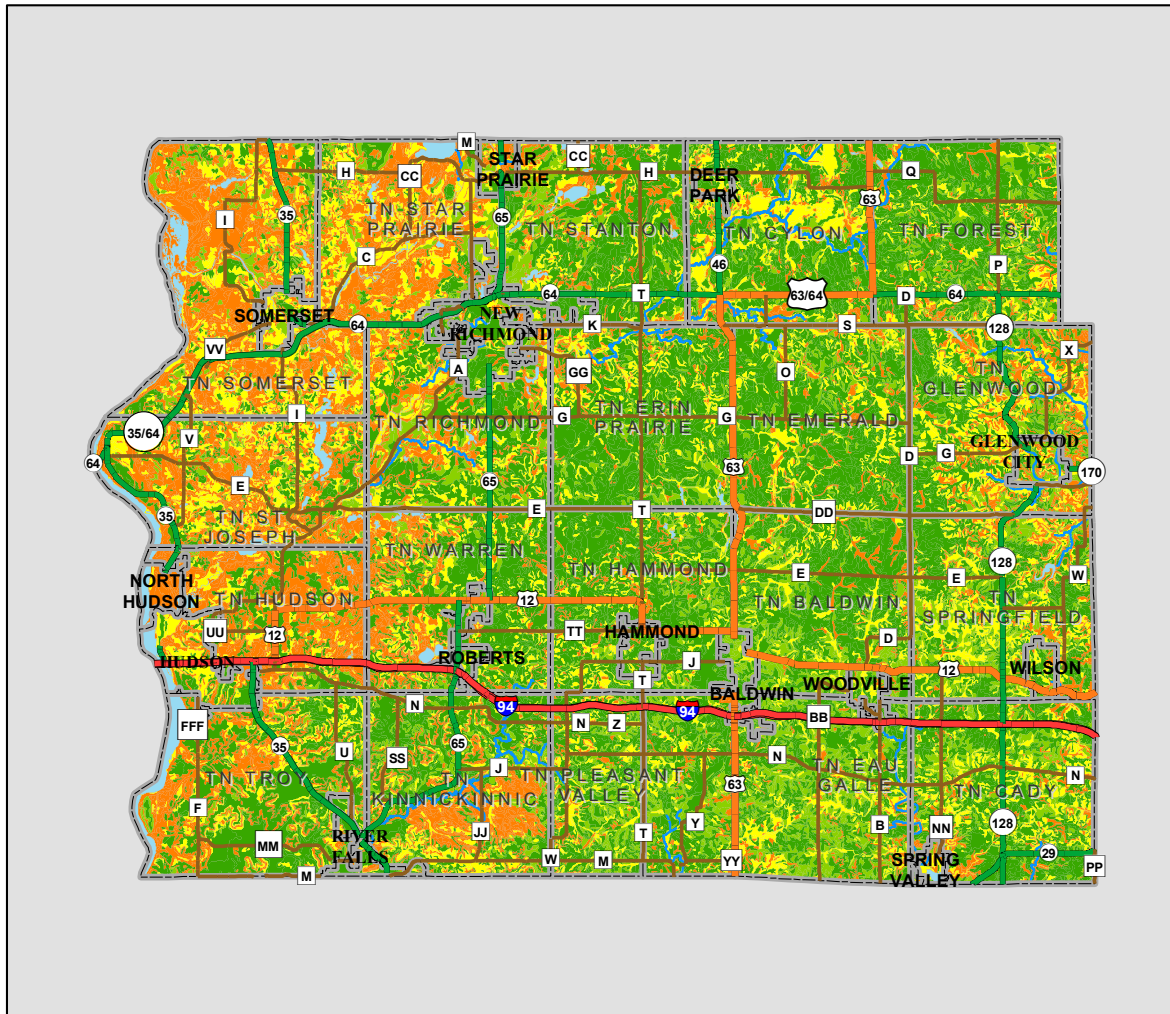


Figure 29

EXISTING COUNTY AGRICULTURAL PRESERVATION PROGRAMS & PLANS

There are many existing programs, policies, and plans relating to the preservation of farmland in St. Croix County and this section attempts to highlight them.

Historic Farmland Preservation

In 1980 the St. Croix County Board of Supervisors adopted a Farmland Preservation Plan. The Plan was intended to guide development away from the most valuable agricultural resources in the County. The plan was written with extensive input from citizens and local officials, especially towns. The Farmland Preservation plan identified several tools for farmland protection. The only tool that was implemented was exclusive agriculture zoning. The other tools, identifying growth areas and setting development density in conjunction with smaller lot sizes, were not implemented. The plan was developed between 1978 and 1980 as a result of development pressures that had been accelerating since 1975. A Farmland Planning Advisory Committee was formed in September 1977. This committee met monthly for two years to apply for a grant, and develop the farmland preservation plan. Prior to 1974, St. Croix County ordinances required public sewer and water for all lots between one and five acres in size. In 1974, the County enacted a new set of ordinances that allowed one acre unsewered lots and set distinct requirements for minor and major subdivisions. As a result of these changes rural residential lot creation rose dramatically between 1975 and 1979. As a result, many towns took several steps to slow residential development.

The towns of Baldwin, Cylon, Kinnickinnic, Stanton and Warren adopted subdivision ordinances prohibiting major subdivisions unless they were located on municipal sewer and water. The towns of Cylon, Stanton, Baldwin, and Pleasant Valley also adopted larger lot size provisions in subdivision ordinances. Finally, the towns of Cylon, Stanton, Star Prairie, Somerset, St. Joseph, Erin Prairie, Baldwin, Troy, Pleasant Valley, Rush River and Eau Galle implemented exclusive agricultural zoning, in conjunction with the County. In one case, the adoption of exclusive agriculture zoning occurred even before the Farmland Preservation Plan was adopted by St. Croix County.

Historically there has been some confusion about the difference between exclusive agricultural zoning, farmland preservation contracts and the income tax incentive associated with each. The farmland preservation contracts are a contract between the farmer or landowner and the state, in return for agreeing not to develop his land the owner gets tax rebates based on a formula. The tax rebates are increased if a farmland preservation plan is adopted and certified by the state.

The farmland preservation plan was certified by the state for most of the towns in St. Croix County. Exclusive agriculture zoning was also based on the farmland preservation plan, and was adopted by ordinance enacted by both a town and the county. Adoption of exclusive agriculture zoning increased the farmland preservation tax credits to the maximum possible with a state certified plan.

Since its adoption there have been numerous problems identified with the original farmland preservation program.

Wisconsin Working Lands Program

To resolve those problems, the Wisconsin Working Lands Program was passed as a part of the state's 2009-2011 biennial budget process. The authority for this program can be found primarily in Chapter 91 of the Wisconsin State Statutes. The goals of the program are to achieve preservation of areas significant for current and future agricultural uses through successful implementation of these components:

- Expand and modernize the state's existing farmland preservation program.
- Establish agricultural enterprise areas (AEAs)
- Develop a purchase of agricultural conservation easement matching grant program (PACE).

Expand And Modernize the State's Existing Farmland Preservation Program

- Modernize county farmland preservation plans to meet current challenges
- Provide planning grants to reimburse counties for farmland preservation planning
- Establish new minimum zoning standards to increase local flexibility and reduce land use conflicts; local governments may apply more stringent standards
- Increase income tax credits for program participants
- Improve consistency between local plans and ordinances
- Simplify the certification process and streamline state oversight
- Ensure compliance with state soil and water conservation standards
- Collect a flat per acre conversion fee when land under farmland preservation zoning is re-zoned for other uses

Establish Agricultural Enterprise Areas

- Maintain large areas of contiguous land primarily in agricultural use and reduce land use conflicts
- Encourage farmers and local governments to invest in agriculture
- Provide an opportunity to enter into farmland preservation agreements to claim income tax credits
- Encourage compliance with state soil and water conservation standards

Develop a Purchase of Agricultural Conservation Easement (PACE) Grant Program

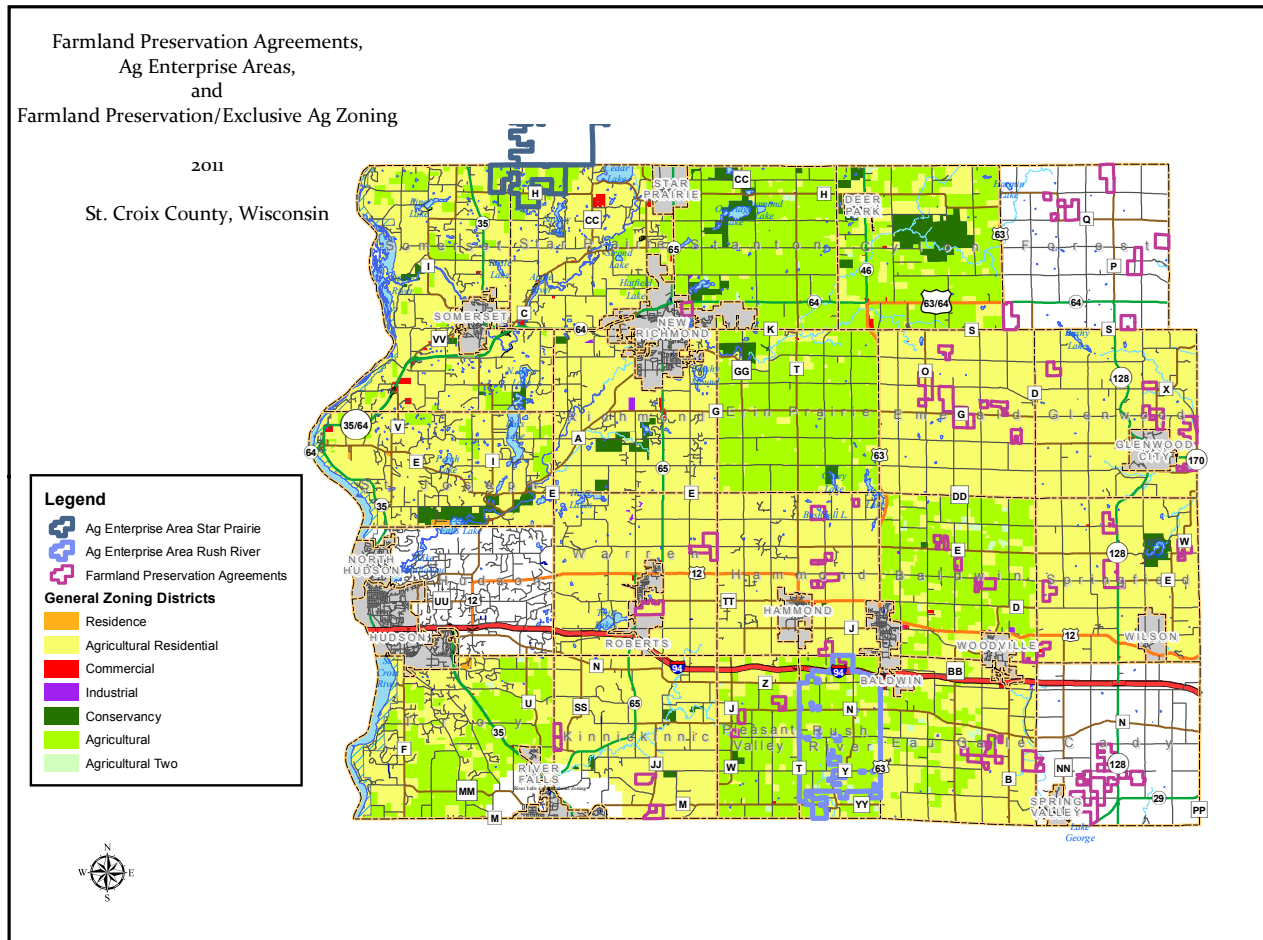
- Protect farmland through voluntary programs to purchase agricultural conservation easements
- Provide up to \$12 million in state grant funds in the form of matching grants to local governments
- and non-profit conservation organizations to purchase agricultural conservation easements from willing sellers
- Stretch state dollars by requiring grants to be matched by other funds such as federal grants, local contributions and/or private donations
- Establish a council to advise the state on pending grants and proposed easement purchases
- Consider the value of the proposed easement for preservation of agricultural productivity, conservation of agricultural resources, ability to protect or enhance waters of the state, and proximity to other protected land
- Ensure consistency of state-funded easement purchases with local plans and ordinances

An income tax credit is available for agricultural properties that are zoned farmland preservation/exclusive agriculture and/or if a landowner signs a long-term farmland preservation agreement and is in an Agricultural Enterprise Area. Whether under zoning or an agreement the land owner's acreage must follow a soil conservation plan or meet state soil and water conservation requirements. In order for landowners to participate in the program, their county must adopt an agricultural or farmland preservation plan and a farmland preservation/exclusive agriculture zoning ordinance which is certified by the State of Wisconsin Department of Agriculture, Trade & Consumer Protection.

Figure 30 shows all Farmland Preservation Agreements, Agricultural Enterprise Areas, and Farmland Preservation/Exclusive Agriculture Zoning as of January 1, 2011, the agreements and zoning are based on the 1980 Farmland Preservation Plan. The County has two Agricultural Enterprise Areas (Rush River and Star Prairie) under the new Working Lands Program.

Once a new Farmland Preservation Plan is adopted by the St. Croix County Board, changes to implement the plan will need to be developed and adopted including amendments to the St. Croix County Zoning Ordinance, especially the farmland preservation/exclusive agriculture district and related ordinances or programs.

Figure 30



Zoning & Land Division Ordinances

Zoning and land division ordinances may include a variety of standards which apply to agricultural and natural resources, such as agricultural zoning districts, wetland or resource conservancy districts, mineral reservation, shoreland or floodplain overlay districts, conservation subdivision design and other performance standards. The county regulates animal units in all districts. They cannot be kept on lots or parcels in a major subdivision unless provided for in the plat; lot sizes must be three acres or more; one animal unit is allowed per acre of land suitable for waste utilization; and exceeding the one unit per acre of land standard is possible with a special exception permit that meets standards.

Livestock Facility Siting Ordinances

St. Croix County controls livestock facility siting ordinance issues through their zoning ordinance.

Manure Storage & Management Ordinance

St. Croix County has adopted a manure storage/animal waste management ordinance under Wisconsin Statutes §92.16 and the Wisconsin Department of Agriculture, Trade & Consumer Protection (DATCP) rules. The ordinance has been reviewed by DATCP for consistency with state standards. Generally, these types of ordinances require all new or altered manure storage facilities be liquid tight and meet Natural Resources Conservation Service (NRCS) standards. The Wisconsin Department of Natural Resources (DNR) also enforces performance standards and prohibitions related to manure management under NR 151 and ATCP 50, which have been integrated into many county ordinances:

Agricultural performance standards

- Control cropland erosion to meet tolerable rates
- Build, modify or abandon manure storage facilities to accepted standards
- Divert clean runoff away from livestock and manure storage areas located near streams, rivers, lakes, or areas susceptible to groundwater contamination
- Apply manure and other fertilizers according to an approved nutrient management plan

Manure management prohibitions

- No overflow of manure storage facilities
- No unconfined manure piles near waterbodies
- No direct runoff from feedlots or stored manure into state waters
- No trampled stream banks or shorelines from livestock

St. Croix County has 23 permitted waste storage structures that are all currently utilized. These structures range in size from a few hundred thousand gallons to 13 million gallons.

There are many more facilities, some being utilized and some not, that existed prior to the adoption of the County's ordinance. An average of three waste storage structures is abandoned each year in St. Croix County. The County is permitting on average two new waste storage facilities a year. Many of these facilities are constructed on existing operations that are expanding their storage capacities.

The structures themselves have many different liners installed, from cement and clay to high-density polyethylene. The larger operations that have gone with sand bedding have some form of sand removal prior to the waste going to the storage structure. Such systems include sand lanes and mechanical separators or a combination of both.

Animal operations without any manure storage structures continue to daily haul their animal waste. Those operations with smaller animal waste storage facilities most commonly use tanker trucks to spread the manure in the fields. Currently there are two waste digesters operating in the county and two more that have been permitted but are not yet constructed. The majority of the larger operations are using a dragline system for injecting the waste; this has minimized the tanker traffic around facilities. Three facilities currently have high-density polyethylene covers for odor control.

County Land & Water Resource Management Plans

The County has a County Land and Water Resource Management Plan. This plan is required in order to maintain eligibility for annual funding through the State Soil and Water Resource Management Grant Program administered by DATCP. The plans must be updated every five years and must be reviewed by the State Land and Water Conservation Board and approved by DATCP.

Erosion Controls

St. Croix County controls erosion issues through their zoning ordinance.

Land Trust Organizations

A land trust organization works with landowners, other conservation organizations and government agencies to protect natural areas, wildlife habitat, working forests, agricultural lands, cultural sites, or other unique areas. Typically, a land trust organization will be granted or sold the development rights to a property in the form of a conservation easement in order to prevent development. In some cases, the development right may be held by a local government entity, while the land trust organization holds a third-party enforcement right. Regardless of the approach, landowners often continue to use the property in a land trust as they had in the past, while gaining certain tax benefits. Existing land trust organizations operating in St. Croix County can be found in *Figure 31*.

Figure 31

St. Croix County Land Trusts		
Name	Location	Area of Operation
Kinnickinnic River Land Trust	River Falls, WI	St. Croix County
Star Prairie Land Preservation Trust	Star Prairie, WI	Polk & St. Croix counties
West Wisconsin Land Trust	Menomonie, WI	Barron, Chippewa, Dunn, Eau Claire, Polk, & St. Croix counties
Source: West Central Wisconsin Regional Planning Commission		

St. Croix County Comprehensive Plan

The St. Croix County Comprehensive Plan will be adopted in 2012. It will address goals, objectives and policies related to the physical development of unincorporated areas in St. Croix County. In addition, it will promote intergovernmental cooperation between all communities in St. Croix County. The St. Croix County Farmland Preservation Plan is part of the County's Comprehensive Plan.

Regulations & Policies in St. Croix County

Figures 32 and 33 encompasses city, village, town and county regulations and policies.

ST. CROIX COUNTY COMPREHENSIVE PLAN

AGRICULTURE & FARMLAND PRESERVATION

Figure 32

Municipal Plans, Ordinances & Regulations	Comprehensive Plan	Official Mapping Ordinance	Zoning Ordinance	Shoreland or Shoreland/Wetland Zoning	Floodplain Ordinance	Extraterritorial Zoning	Lower St. Croix Riverway Ordinance	Subdivision Ordinance	Extraterritorial Plat Review	Towns with Village Powers
St. Croix County	i		●	●	●		●	●		
Cities										
Glenwood City	●	●	●		●			●	●	
Hudson	●	●	●	●	●	●	●	●	●	
New Richmond	●	●	●	●	●			●	●	
River Falls	●	●	●	●	●	●		●	●	
Villages										
Baldwin	●	●	●		●			●	●	
Deer Park	●	●	●	●				●	i	
Hammond	●		●		●			●	●	
North Hudson	●	●	●		●		●	●	●	
Roberts	●	●	●	●				●	●	
Somerset	●	●	●		●			●	●	
Spring Valley	Not included; primarily in Pierce County									
Star Prairie	●		●	●	●			●	●	
Wilson		●	●	●	●			●	●	
Woodville	●	●	●		●			●	●	
Towns										
Baldwin	●		u	u	u			u●		●
Cady	●			u	u			u●		●
Cylon	●		u	u	u			u●		●
Eau Galle	●		u	u	u			u●		●
Emerald	●		u	u	u			u		●
Erin Prairie	●	i	u	u	u			u i		●
Forest	●			u	u			u●		●
Glenwood		●	u	u	u			u		
Hammond	●		u	u	u			u		●
Hudson	●	●	●	u	u		u	u●		●
Kinnickinnic	●	i	u	u	u			u i		●
Pleasant Valley	●		u	u	u			u●		●
Richmond	●		u	u	u			u		●
Rush River	●	●	u	u	u			u●		●
St. Joseph	●		u	u	u		u	u●		●
Somerset	●	●	u	u	u		u	u●		●
Springfield		●	u	u	u			u		
Stanton	●	●	u	u	u			u●		●
Star Prairie	●	i	u	u	u			u		●
Troy	●		u	u	u		u●	u●		●
Warren	●		u	u	u			u●		●
● = Regulation or Policy adopted by the jurisdiction; may be part of a larger ordinance u = County regulations which apply to a city, village or town i = In-progress or under consideration										

ST. CROIX COUNTY COMPREHENSIVE PLAN

AGRICULTURE & FARMLAND PRESERVATION

Figure 33 Municipal Ordinances & Regulations	Conservation Design Policies	Density Transfer or Transfer of Development Rights	Traditional Neighborhood Development Ordinance	Manufactured/Mobile Home Park Standards	Development Impact Ordinances/Fees	Telecommunications or Cell Tower Ordinance	Junk or Related Nuisance Ordinance	Animal Control Ordinance	Non-Metallic Mining Ordinance	Large Livestock Facility/Feedlot Siting Ordinance
St. Croix County	•					•		•	•	•
Cities										
Glenwood City				•	•		•	•	u	
Hudson			i	•	•	•	•	•	•	
New Richmond	•		•	•	•	•	•	•	u	
River Falls			•						u	
Villages										
Baldwin									u	
Deer Park				•	•		•	•	u	
Hammond									u	
North Hudson				•	•		•	•	u	
Roberts				•	•		•	•	u	
Somerset					•		•	•	•	
Spring Valley	Not included; primarily in pierce county									
Star Prairie	•			•	•		•	•	u	
Wilson									u	
Woodville									u	
Towns										
Baldwin	u			•		u			u	u
Cady	u					i		•	u	i
Cylon	u					u			u	u
Eau Galle	u			•		u			u	u
Emerald	u					u			u	u
Erin Prairie	u i	i		• i	i	u i	i	i	u	u i
Forest	u						•	•	u	
Glenwood	u			•		u			u	u
Hammond	u					u			u	u
Hudson	u			•			•	•	u	
Kinnickinnic	u i			•	i	u	i	i	u	u i
Pleasant Valley	u					u			u	u
Richmond	u			•	•	u		•	u	u
Rush River	u			•		u			u	u
St. Joseph	u			•	•	u	•	•	u	u
Somerset	u			•	•	u		•	u	u
Springfield	u			•	•	u		•	u	u
Stanton	u			•	•	u		•	u	u
Star Prairie	u			•	•	u	•	•	u	u
Troy	u •	•				u			u	u
Warren	u •					u			u	u
• = Regulation or Policy adopted by the jurisdiction; may be part of a larger ordinance u = County regulations which apply to a city, village or town i = In-progress or under consideration										

APPENDIX A – FARMLAND PRESERVATION SURVEY REPORT

APPENDIX B – ST. CROIX COUNTY’S LESA SYSTEM

APPENDIX C – FARMLAND PRESERVATION AREA MAPS BY TOWN